



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

OCT 23 1996

Mary A. Gade, Director
217/524-3300

2200 Churchill Road, Springfield, IL 62794-9276

October 21, 1996

CERTIFIED MAIL

Z 363 620 853

Z 363 620 854

OWNER

Stony Island Reclamation Company
123 N. Northwest Highway
Park Ridge, Illinois 60068

OPERATOR

Land and Lakes Company
Post Office Box 778
Park Ridge, Illinois 60068

Re: 0316000034 -- Cook County
Land & Lakes #3
Permit No. 1995-060-LFM
Log No. 1995-060
Expiration Date: October 7, 2001
Permit File

US EPA RECORDS CENTER REGION 5



Dear Mr. Cowhey:

Permit is hereby granted to Stony Island Reclamation Company, as owner and Land and Lakes Company as operator, approving modification of an existing municipal solid and non-hazardous special waste landfill all in accordance with the application and plans prepared by Dr. Neil D. Williams, P.E. of GeoSyntec Consultants. Final plans, specifications, application, and supporting documents, as submitted and approved, shall constitute part of this permit and are identified in the records of the Illinois Environmental Protection Agency (the "Agency"), Bureau of Land, Additional Information Division of Land Pollution Control by the permit number and log number designated in the heading above.

The application approved by this permit consists of the following documents:

<u>DOCUMENT</u>	<u>DATED</u>	<u>DATE RECEIVED</u>
Original Application Log No. 1995-060	February 16, 1995	February 17, 1995
Addendum	March 6, 1995	March 7, 1995
Addendum	April 14, 1995	April 17, 1995
Addendum	August 7, 1995	August 8, 1995

Addendum	October 30, 1995	October 31, 1995
Additional Information (Re: PEI com.)	October 30, 1995	October 31, 1995
Addendum	February 2, 1996	February 2, 1996
Addendum	April 19, 1996	April 22, 1996
Addendum	May 30, 1996	May 31, 1996
Additional Information (Re: PEI com.)	June 20, 1996	June 24, 1996
Addendum	August 7, 1996	August 8, 1996
Addendum	August 27, 1996	August 29, 1996
Addendum	October 11, 1996	October 15, 1996

Specifically, this permit approves:

- a. The Significant Modification of the development and operation of this landfill so as to comply with the applicable requirements of Title 35, Illinois Administrative Code (hereinafter 35 IAC), Subtitle G, Parts 811 and 812, pursuant to 35 IAC, Sections 814.104, 814.301 and 814.302.
- b. The modification of development of the existing landfill consisting of a single unit of approximately 69 acres with an estimated total capacity of 25 million cubic gate yards and a net remaining disposal capacity of approximately 6,400,000 cubic gate yards. The maximum final elevation shall be approximately 667.5 feet above mean sea level.
- c. Operation (i.e., waste disposal) within the permitted boundaries of the existing landfill unit except for the second stage of Cell VI.
- d. Acceptance of special waste streams without individual special waste stream authorizations, in accordance with the special conditions listed in Part III of this permit.

Pursuant to Section 39(a) of Illinois Environmental Protection Act (Act) and 35 IAC, 813.104(b), this permit is issued subject to the development, operating and reporting requirements for non-hazardous waste landfills in 35 IAC, Parts 810, 811, 812, 813 and 814, the standard conditions attached hereto, and the following special conditions. In case of conflict between the permit application and these conditions (both standard and special), the conditions of this permit shall govern.

I. CONSTRUCTION QUALITY ASSURANCE

1. All necessary surface drainage control facilities shall be constructed prior to other disturbance in any area.
2. No part of the unit shall be placed into service or accept waste until an acceptance report for all the activities listed below has been submitted to and approved by this Agency as a significant modification pursuant to 35 IAC, Sections 811.505(d) and 813.203.
 - a. Preparation of the subgrade and foundation to design parameters;
 - b. Installation of the compacted earth/synthetic liner;
 - c. Installation of slurry trenches or cutoff walls;
 - d. Installation of the leachate drainage and collection system;
 - e. Placement of final cover;
 - f. Installation of gas control facilities; and
 - g. Construction of ponds, ditches, lagoons and berms.
3. The permittee shall designate an independent third party contractor as the Construction Quality Assurance (CQA) Officer(s). The CQA Officer(s) shall be an Illinois Certified Professional Engineer who is independent from and not under the control or influence of the operator, any employee of the operator, or any other corporation, company or legal entity that is a subsidiary, affiliate, parent corporation or holding corporation associated with the operator.
4. The CQA Officer(s) designated pursuant to Condition I.3. shall personally be present during all construction and testing that is subject to CQA certification pursuant to 35 IAC, Section 811.503(a). If the CQA Officer(s) is unable to be present as required, then a written explanation and signed statement must be provided for each absence pursuant to 35 IAC, Section 811.503(b).
5. The clay liner shall be tested for density and moisture content a minimum of five tests per lift per acre.
6. A minimum of one laboratory permeability test shall be performed for every 5,000 cubic yards of liner soil placed.

7. If the clay portion of the liner is exposed to freezing conditions, it must be recertified. The designated CQA Officer(s) shall then certify that the clay portion of the liner and all necessary repairs to the leachate drainage layer meet the required design standards. This certification must be provided to the IEPA prior to disposal of waste on the subject portion of the liner. If operating authorization has not yet been issued for that area, the recertification shall be included in the application for Significant Modification of Permit to obtain Operating Authorization for that area.
8. Pursuant to 35 IAC, Section 811.505(d), upon completion of construction of each major phase, the CQA Officer(s) shall submit an acceptance report to the Agency. The acceptance report shall be submitted before the structure is placed into service and shall contain the following:
 - a. A certification by the CQA Officer(s) that the construction has been prepared and constructed in accordance with the engineering design;
 - b. As-built drawings; and
 - c. All daily summary reports.
9.
 - a. The operator shall maintain a minimum "freeboard" of one (1) foot between the top edge of the sidewall liner and the top of the waste.
 - b. Just prior to installing an increment of the sidewall liner, the sidewall liner in that area shall be inspected. Any areas damaged by desiccation, frost action, etc. shall be excavated and reconstructed in accordance with the Construction Quality Assurance program approved by this permit.
 - c. After each increment of the compacted earth liner up the sidewall is completed, the operator shall provide written notification of its completion to this Agency's Maywood Regional Office. Upon receipt of the notification, the inspector shall be allowed fifteen working days to examine the construction. The Agency is not obligated to approve the construction or certification. The operator may dispose of refuse in the subphase after the fifteen day period if, having complied with the terms of this condition, the operator is not informed of a problem by the Agency or its agents.
 - d. At the same time the Maywood Regional Office or delegated government is given notification that an increment of the sidewall liner has been completed, the Permit Section shall be provided with the information required in an Acceptance Report pursuant to 35 Ill. Adm. Code, 811.505(d) on its construction.

10. Applications for operating authorization shall not be made for areas of less than 1.5 acre increments of constructed liner.
11. All stakes and monuments marking property boundaries and the permit area shall be maintained, inspected annually and surveyed no less frequently than once in five years by a professional land surveyor.
12. All standards for testing the characteristics and performance of materials, products, systems and services shall be those established by the American Society for Testing and Materials (ASTM) unless otherwise stated in the permit application.

II. OPERATING CONDITIONS

1. Pursuant to 35 IAC, Sections 811.107(a) and 811.107(b), throughout the operating life of this landfill, waste shall not be placed in a manner or at a rate which results in unstable internal or external slopes or interference with construction, operation or monitoring activities.
2. The operator of this solid waste facility shall not conduct the operation in a manner which results in any of the following:
 - a. refuse in standing or flowing waters;
 - b. leachate flows entering waters of the State;
 - c. leachate flows exiting the landfill confines (i.e., the facility boundaries established for the landfill in a permit or permits issued by the Agency);
 - d. open burning of refuse in violation of Section 9 of the Illinois Environmental Protection Act (Act);
 - e. uncovered refuse remaining from any previous operating day or at the conclusion of any operating day, unless authorized by permit;
 - f. failure to provide final cover within time limits established by Board regulations;
 - g. acceptance of wastes without necessary permits;
 - h. scavenging as defined by Board regulations;
 - i. deposition of refuse in any unpermitted (i.e., without an Agency approved significant modification authorizing operation) portion of the landfill;

- j. acceptance of a special waste without a required manifest and identification record;
 - k. failure to submit reports required by permits or Board regulations;
 - l. failure to collect and contain litter from the site by the end of each operating day.
3. Moveable, temporary fencing shall be used to prevent blowing litter when the refuse is above the natural ground line.
4. At the end of each day of operation all exposed waste shall be covered with:
- a. Clean soil at least six (6) inches thick (i.e., conventional daily cover); or
 - b. An alternate cover as described below.
5. Geotextile fabric, plastic panels, Sanifoam, LD Foam are approved as alternate material for daily cover pursuant to 35 IAC, Sections 811.106(b) and 812.111(b). Use of alternate materials as daily cover shall be subject to the following conditions:
- a. If any alternate materials other than those approved by this permit are to be used, their use must be approved by this Agency through the permit process.
 - b. At any one time, the total area, using alternate materials as daily cover, shall be no more than 2,000 square yards. Beyond this maximum, daily cover soil shall be used on all areas where waste has been disposed and to which intermediate or final cover has not been applied.
 - c. Areas upon which alternate cover has been used must be covered with either conventional cover or additional waste within six days.
 - d. Conventional daily cover in accordance with 35 IAC 811.106(a) shall be used if weather or other conditions adversely affect the ability of the alternate cover materials to prevent problems with blowing litter, fire, odors, or vectors.
 - e. Geotextile fabric and plastic panels shall be anchored adequately to prevent wind damage. If the alternate daily cover is torn during or after placement they must be repaired immediately or the damaged area must be covered with six inches of daily cover soil. If tires are used as weights for the alternate daily cover, they shall be converted tires, in accordance with 35 IAC, Part 848: Management of Used and Waste Tires.

- f. A continuous layer of a minimum of one inch thickness of SaniBlanket or a three-inch layer of LD Foam shall be applied to the top of the waste. Application of foam during inclement weather is not allowed unless the foam cover installed meets these requirements.
 - g. When an alternate cover is applied, the operator shall keep a record including a description of the weather conditions, the type of alternate cover used and its performance. A summary of this information shall be provided with this facility's annual reports.
 - h. Any alternate daily cover which has been used for daily cover may not be reused for any purpose (including road underlayment and erosion control) outside of permitted disposal boundaries.
- 6. No later than 60 days after placement of the final lift of waste in any area, the area shall receive a final cover system meeting the design specifications approved in this permit application. The low permeability layer over the 12 acres of cell VI shall consist of a geomembrane over a one foot layer of maximum hydraulic conductivity 1×10^{-6} cm/s clay and 2 feet of select waste (soils/sludge). The remainder of the waste disposal area that has not been closed and vegetated prior to September 18, 1990, shall receive three feet of maximum hydraulic conductivity 1×10^{-7} cm/s clay. The final protective layer shall consist of 0.5 feet of topsoil capable of supporting vegetation over 2.5 feet of soil and with a geocomposite drainage layer over membrane on sideslopes. The total thickness of the final protective layer shall not be less than three feet.
- 7. All waste not covered within sixty days of placement with additional waste or final cover shall have an intermediate cover of compacted clean soil with a minimum thickness of one foot applied to it.
- 8. The operator shall implement a load checking program that meets the requirements of 35 IAC, Section 811.323. If regulated hazardous waste or other unauthorized wastes are discovered, the Agency shall be notified no later than 5:00 p.m. the next business day after the day it is detected. The load checker shall prepare a report describing the results of each inspection. A summary of these reports shall be submitted to the Agency as part of this facility's annual report.
- 9. Asbestos debris from construction-demolition shall be managed in accordance with the National Emission Standards for Hazardous Air Pollutants (NESHAPS) regulations.
- 10. Management of Unauthorized Waste

- a. Landscape waste found to be mixed with municipal waste will be removed the same day and transported to a facility that is operating in accordance with the Act, Title V, Sections 21.
- b. Lead-acid batteries will be removed the same day and transported either to a drop-off center handling such waste, or to a lead-acid battery retailer.
- c. Potentially infectious medical waste (PIMW) found to be mixed with municipal waste shall be managed in accordance with 35 Ill. Adm. Code, Subtitle M.
- d. Tires found to be mixed with municipal waste shall be removed and managed in accordance with Section 55 of the Act.
- e. White good components mixed with municipal waste shall be removed and managed in accordance with Section 22.28 of the Act.
- f. This facility is prohibited from disposing any waste containing polychlorinated bi-phenyls (PCBs) in concentration greater than 50 ppm, pursuant to the Toxic Substance Control Act (TSCA).
- g. No liquid waste (special or non-special) as determined by the Paint Filter Test shall be disposed unless the waste is from a household or is in a small container similar in size to that normally found in household waste and the container was designed for use other than storage. The prohibition applies to on-site generated wastes except for leachate or gas condensate that is specifically approved for recirculation into the landfill by permit. However, minor amounts of liquid resulting from precipitation (rain, sleet, hail or snow) during transport and disposal operations shall not be construed as a violation of this condition.
- h. In accordance with Section 21.6 of the Act, no owner or operator of a sanitary landfill shall accept liquid used oil for final disposal that is discernable in the course of prudent business operation. "Liquid used oil" shall not include used oil filters, rags, absorbent material used to collect spilled oil or other materials incidentally contaminated with used oil, or empty containers which previously contained virgin oil, re-refined oil, or used oil.
- i. After the unauthorized waste has been removed, a thorough cleanup of the affected area will be made according to the type of unauthorized waste managed. Records shall be kept for three (3) years and will be made available to the Agency.

11. Operating hours are those hours during which waste may be accepted. For this facility, the operating hours shall be limited to 5:00 a.m. through 7:00 p.m., Monday through Saturday. Adequate lighting shall be provided for outdoor activities at the landfill occurring before sunrise or after sunset.
12. If it is required for the facility to be open beyond normal operating hours to respond to emergency situations, a written record of the date(s), times and reason the facility was open shall be made part of the operating record for the facility. The IEPA-FOS Regional Office, and when applicable, the county authority responsible for inspections of this facility per a delegation agreement with the Agency shall be notified no later than 5:00 p.m. the next business day following the acceptance of waste outside the specified operating hours.
13. Road building materials for roads at the facility may be stockpiled on-site in the amount estimated to be needed within the next construction season provided they are managed in accordance with 35 IAC, Section 811.108(c)(1).
14. Equipment shall be maintained and available for use at the facility during all hours of operation to allow proper operation of the landfill. If breakdowns occur that would prevent proper facility operation, back-up equipment shall be brought into the site.
15. All utilities, including but not limited to heat, lights, power, communications equipment and sanitary facilities necessary for safe, efficient and proper operation of the landfill shall be available at the facility at all times.
16. Waste shall be deposited at the fill face and compacted upward into the fill face unless precluded by extreme weather conditions or for reasons of safety.
17. The operator shall implement methods for controlling dust so as to prevent wind dispersal of particulate matter off-site.
18. The facility shall be constructed and operated to minimize the level of equipment noise audible outside the facility. The facility shall not cause or contribute to a violation of 35 IAC, Parts 900 through 905.
19. The operator shall implement measures to control the population of disease and nuisance vectors.
20. The operator shall institute fire protection measures in accordance with the proposed fire safety plan.

21. The operator shall implement methods to prevent tracking of mud by hauling vehicles onto public roadways.
22. Access to the active area and all other areas within the boundaries of the facility shall be controlled by use of fences, gates and natural barriers to prevent unauthorized entry at all times.
23. A permanent sign shall be maintained at the facility entrance containing the information required under 35 IAC, Section 811.109(b)(1) through (5).

III. SPECIAL WASTE

A. DISPOSAL OF SPECIAL WASTE

1. The permittee is authorized to accept non-hazardous special waste that meets the definition of industrial process waste or pollution control waste as found in Section 3.17 and 3.27, respectively, of the Illinois Environmental Protection Act, in accordance with the following requirements:
 - a. The waste is analyzed in accordance with the requirements described below and complies with the acceptance criteria in the approved waste analysis plan;
 - b. The waste is delivered by an Illinois licensed special waste hauler or an exempt hauler as defined in 35 IAC, Section 809.211; and
 - c. The waste is accompanied by a manifest, if required.
2. The permittee shall obtain a completed Special Waste Preacceptance Form (enclosed) and a preacceptance analysis from each generator for each waste to be accepted. In addition, the annual Generator and Certification form (enclosed), which certifies the waste has not changed since the last analysis, must be completed and included in the operating record. A complete laboratory analysis must be provided with the exceptions listed below.

Analysis shall be conducted using SW-846 test methods. The waste shall be reanalyzed at least every five years and must identify the actual concentration of each chemical constituent and state of each physical parameter. In all cases a copy of the lab analysis (on lab letterhead and signed by a responsible party such as the person conducting the analysis or his/her supervisor) must be included in the operating record with the Special Waste Preacceptance format (Profile Identification Sheet). The analysis may not be greater than one year old at the

time. A new analysis is required if the composition of the waste changes (normal variations in waste composition are expected and are not included in this requirement). All waste must be analyzed as follows:

- a. The permittee shall obtain the following lab analyses to determine the concentrations of the following parameters.

Paint Filter Test

Flash point

Sulfide (reactive)

Cyanide (reactive)

Phenol (total)

pH

Toxicity Characteristic Constituents

- b. The permittee shall obtain analysis for reactive sulfides and cyanides. For waste containing 250 ppm or greater reactive cyanide or 500 ppm or greater reactive sulfide it is presumed hazardous pursuant to 35 IAC, Section 721.123(a)(5) unless specific information to show it does not present danger to human health or the environment is provided. Analysis for total sulfide and/or cyanide may be substituted for reactive concentrations if they are equal to or less than 10 ppm. For wastes containing greater than 10 ppm reactive cyanide or reactive sulfide, the permittee shall not accept the waste unless the generator provides a signed and dated statement indicating that none of the following have occurred:
 - i. The waste has never caused injury to a worker because of H₂S and/or HCN generation;
 - ii. That the OSHA work place air concentration limits for H₂S and/or HCN have not been exceeded in areas where the waste is generated, stored or otherwise handled; or
 - iii. That air concentrations of H₂S and/or HCN, above 10 ppm, have not been encountered in areas where the waste is generated, stored or otherwise handled.
- c. The permittee shall obtain analysis for phenols. If the total phenol concentration is greater than 1000 ppm, the waste will be required to be drummed and labeled, unless justification that this precaution is not necessary is provided. The justification must demonstrate skin contact is unlikely during transport or disposal.

- d. The permittee shall obtain metals and organics analysis. Either procedure may be utilized (i.e., total or TCLP), but any constituent whose total concentration exceeds the TCLP limit specified in 35 IAC, Section 721.124 must be analyzed using the TCLP test and the results reported, unless an alternative test has been approved by the Agency. TCLP test methods must be in accordance with SW 846-1311.
 - e. EXCEPTIONS:
 - i. The generator may certify that the eight pesticides (D012, D013, D014, D015, D016, D017, D020 and D031) would not reasonably be expected to be present in their waste based on the nature of the generator's business.
 - ii. Petroleum contaminated media and debris from LUST sites subject to corrective action regulation under 35 IAC, Part 731 are temporarily exempt from complete TCLP analysis and the generator may limit analyses to flashpoint, paint filter test and TCLP lead.
 - iii. For off-specification, unused or discarded commercial or chemical products, an MSDS to determine the hazardous constituents present may be provided in lieu of analytical results.
 - f. Pursuant to 35 Ill. Adm. Code 722.111 the generator of a solid waste is required to determine if the waste is hazardous and comply with all applicable hazardous waste regulations. For any waste that has been determined to be hazardous, the results of quality assurance testing for the treatment program, taken at an appropriate frequency to demonstrate the waste is no longer hazardous, must be obtained. Verification that the waste meets the land disposal restrictions must also be documented. These requirements are in addition to the other standard special waste test requirements.
- 3. An individual waste stream permit is no longer required by this Agency for this facility. Therefore, a waste stream permit number will no longer be required on the manifest when shipping waste to this facility as authorized by this permit.
 - 4. Special waste generated due to an emergency situation may be disposed without complete TCLP analysis if:
 - a. The permittee ensures that the generator has received an incident number from the Illinois Emergency Management Agency at 1/800/782-7860 within Illinois or 1/217/782-7860 outside of Illinois and,

- b. The permittee receives authorization from the Emergency Response Unit at 1/217/782-3637 and,
 - c. The waste is analyzed for the chemical constituents required by the Emergency Response Unit.
- 5. The permittee shall conduct the following analysis for waste received in labeled containers in lab packs including commingles wastes are subject to the following requirements:
 - i. Compatibility review in accordance with the procedures identified in USEPA document EPA-600/2-80-076.
 - ii. MSDS review to determine the hazardous constituents present and appropriate USEPA hazardous waste class.
- 6. RCRA empty containers received as a special waste are subject to conditions which state:
 - a. Containers have a rated capacity of less than 110 gallons only.
 - b. Containers which formerly held 'P' listed hazardous waste or TSCA regulated quantities of PCBs or empty compressed gas cylinders are not included under this permit.
 - c. All containers must meet the definition of empty as described in 35 Ill. Adm. Code, Section 721.107(b).
 - d. Additionally, where possible, a copy of the material safety data sheets for products last contained will be obtained and kept on file.
 - e. For drums, at least one end must be removed and the drums must be crushed flat.
- 7. The Special Waste Preacceptance Form shall be utilized for the special waste profile identification requirements of 35 IAC, Section 811.404(a).
- 8. The Annual Generator Recertification for Disposal Special Waste format shall be utilized for the special waste recertification requirements of 35 IAC, Section 811.404(b).

9. The operator shall retain all special waste records until the end of the post-closure period in accordance with 35 Ill. Adm. Code 811.405.

IV. RECORDKEEPING

1. Information developed by the operator but not yet forwarded to the Agency in a quarterly or annual report shall be kept at or near the facility for inspection by the Agency upon request during normal working hours.
2. Information and observations derived from load checking inspections shall be recorded in writing and retained at the facility for at least three years.
3. Every person who delivers special waste to a special waste hauler, every person who accepts special waste from a special waste hauler and every special waste hauler shall retain a copy of the special waste transportation record as a record of each special waste transaction. These copies shall be retained for three years and shall be made available at reasonable times for inspection and photocopying by the Agency pursuant to Section 4(d) of the Act.
4. The operator shall retain copies of any special waste profile identification sheets, special waste recertifications, certifications of representative samples, special waste laboratory analyses, special waste analysis plans, and any waivers of requirements, at the facility until the end of the closure period and thereafter at the Site Office until the end of the post-closure care period.
5. Inspections of the closed landfill shall be conducted in accordance with the approved post-closure care plan. Records of field investigations, inspections, sampling and corrective action taken are to be maintained at the site and made available to IEPA personnel. During the post-closure care period, those records are to be maintained at the office of the site operator.
6. The owner or operator shall record and retain near the facility in an operating record or in some alternative location specified by the Agency, the information submitted to the Agency pursuant to 35 IAC, Parts 812 and 813, as it becomes available. At a minimum, the operating record shall contain the following information, even if such information is not required by 35 IAC, Part 812 or 813:
 - a. Any location restriction demonstration required by 35 IAC, Sections 811.302, 812.109, and 812.303 and 812.305;
 - b. Inspection records, training procedures, and notification procedures required by 35 IAC, Section 811.323;

- c. Gas monitoring results and any remediation plans required by 35 IAC, Sections 811.310 and 811.311;
- d. Any MSWLF unit design documentation for placement of leachate or gas condensate in a MSWLF unit required by 35 IAC, Section 811.107(m);
- e. Any demonstration, certification, monitoring results, testing, or analytical data relating to the groundwater monitoring program required by 35 IAC, Sections 811.319, 811.324, 811.325, 811.326, 812.317, 813.501 and 813.502;
- f. Closure and post-closure care plans and any monitoring, testing, or analytical data required by 35 IAC, Sections 811.110, 811.111, 812.114(h), 812.115 and 812.313; and
- g. Any cost estimates and financial assurance documentation required by 35 IAC Part 811, Subpart G.

V. GENERAL CONDITIONS

- 1. This permit is issued with the expressed understanding that no process discharge to Waters of the State or to a sanitary sewer will occur from these facilities except as authorized by a permit issued by the Bureau of Water Pollution Control.
- 2. Site surface drainage, during development, during operation and after the site is closed, shall be managed in accordance with the approved drainage control plan.
- 3. If changes occur which modify any of the information the permittee has used in obtaining a permit for this facility, the permittee shall notify the Agency. Such changes would include but not be limited to any changes in the names or addresses of both beneficial and legal titleholders to the herein-permitted site. The notification shall be submitted to the Agency within fifteen days of the change and shall include the name or names of any parties in interest and the address of their place of abode; or, if a corporation, the name and address of its registered agent.
- 4. Pursuant to 35 IAC, Section 813.201(a), any modifications to this permit shall be proposed in the form of a permit application and submitted to the Agency.
- 5. Pursuant to 35 IAC, Section 813.301, an application for permit renewal shall be filed with the Agency at least ninety days prior to the expiration date of this permit.
- 6. The permittee shall provide, by January 19, 1997, a legal description prepared by a registered professional land surveyor that identifies the waste boundary in relation to

the facility boundary. This map shall be submitted in the form of a significant modification application to comply with 35 IAC 811.104(a) and (b), and 812.112.

7. The permittee shall not alter any undisturbed areas of the facility without first obtaining a written statement from the Army Corps of Engineers confirming that there are no wetlands on the facility that will be impacted by the activity. If any wetland might be impacted, written confirmation from the Illinois Department of Natural Resources must also be obtained stating that the activity will not adversely impact endangered species habitat.

VI. SURFACE WATER CONTROL

1. Runoff from disturbed areas to Waters of the State shall be permitted by the Agency in accordance with 35 IAC, Part 309, and meet the requirements of 35 IAC 304 unless permitted otherwise.
2. All surface water control structures other than temporary diversions for intermediate phases shall be operated until the final cover is placed and erosional stability is provided by the final protective layer of the final cover system.
3. Runoff from undisturbed areas resulting from precipitation events less than or equal to the 25-year, 24-hour precipitation event shall be diverted around disturbed areas where possible and not commingled with runoff from disturbed areas.
4. Site surface drainage, during development, during operation and after the site is closed, shall be managed in accordance with the approved drainage control plan detailed in Permit Application Log No. 1995-060. Stormwater management structures consisting of perimeter ditches and sediment basins shall be constructed within 12 months of the date of this permit or prior to disturbing any portion of a drainage area identified in Application Log No. 1995-060. Approval by this permit by the IEPA Bureau of Land does not relieve the permittee from compliance with requirements from any other regulatory authorities.

VII. LEACHATE MANAGEMENT/MONITORING

1. Pursuant to 35 IAC, Section 811.309(h)(1), leachate from this landfill shall be collected and disposed beginning as soon as it is first produced and continuing for at least five years after closure. Collection and disposal of leachate may cease only when the conditions described in 35 IAC, Section 811.309(h)(2) have been achieved. Leachate removed from this landfill shall be treated at an IEPA permitted facility in accordance with the leachate management plan proposed in Permit Application Log No. 1995-060.

2. Pursuant to 35 IAC, Sections 811.307(a) and (b), 811.308(a) and (h), and 811.309(a), leachate shall be pumped from the side slope riser sump(s) before the level of leachate rises above the invert of the collection pipe(s) at its lowest point(s). Leachate removal as such shall be performed throughout the period that the leachate collection/management system must be operated in accordance with Permit Application Log No. 1995-060.
3. In the event that the leachate monitoring program detects a constituent in the leachate that is not already in the parameter lists for the groundwater monitoring program, the operator shall, within 90 days of such detection, submit to the Agency a permit application which either:
 - a. Proposes to add the constituent to the groundwater monitoring program; or
 - b. Demonstrates why adding the constituent to the groundwater monitoring program is not necessary or appropriate.
4. The following monitoring points are to be used in the Leachate Monitoring Program for this facility:

Leachate Monitoring Points

<u>Applicant Designation</u>	<u>Agency Designation</u>
Cell VI collection sump	L301*
LM1	L302
LM2	L303
LM3	L304
LM4	L305
LM5	L306
P1	P301
P2	P302
P3	P303

*Samples may be collected anywhere from the sump to the storage pond. However, they must be taken prior to discharge into the pond.

5. Pursuant to 35 IAC, Sections 811.309(g), 811.319(a)(1)(C)(ii), 810.103, 722.111 and 721, Subpart C, leachate monitoring (i.e., sampling, measurements and analysis) must be implemented at each leachate monitoring point when that device accumulates a measurable quantity of leachate for the first time. The concentrations or values for the

parameters contained in List L1 (below) shall be determined on a quarterly basis for each "producing" monitoring point and submitted with the quarterly groundwater reports.

The concentrations for the parameters contained in List L2 (also below) shall be determined annually. Condition VII.6. presents the sampling, testing and reporting schedules in tabular form. Leachate monitoring at each monitoring point shall continue as long as groundwater monitoring at this landfill is necessary pursuant to 35 IAC, Section 811.319(a)(1)(C).

LIST L1

<u>Routine Leachate Monitoring Parameters</u>	<u>STORET</u>
Temp. of Leachate Sample (°F)	00011
Specific Conductance	00094
pH	00400
Elevation Leachate Surface	71993
BTM of Well Elevation	72020
Leachate Level from Measuring Point ft.	72109
Arsenic (total)	01002
Barium (total)	01007
Cadmium (total)	01027
Chromium (hexavalent)	01032
Chromium (total)	01034
Copper (total)	01042
Cyanide	00720
Fluoride	00951
Iron (total)	01045
Lead (total)	01051
Manganese (total)	01055
Nickel (total)	01067
Oils (hexane soluble or equivalent)	00550
Phenols	32730
Silver (total)	01077
Zinc (total)	01092
Total Dissolved Solids	70300
Total Suspended Solids	00530
Ammonia Nitrogen - N	00610
Bacteria (Fecal Coliform)	31616
Biochemical Oxygen Demand(BOD ₅)	00310
Mercury (total)	71900
Phosphorous	00665
Chemical Oxygen Demand (COD)	00335

LIST L2

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
Temp. of Leachate Sample (°F)	00011
Specific Conductance	00094
pH	00400
Elevation Leachate Surface	71993
BTM of Well Elevation	72020
Leachate Level from Measuring Point ft.	72109
1,1,1,2-Tetrachloroethane	77562
1,1,1-Trichloroethane	34506
1,1,2,2-Tetrachloroethane	34516
1,1,2-Trichloroethane	34511
1,1-Dichloroethane	34496
1,1-Dichloroethylene	34501
1,1-Dichloropropene	77168
1,2,3-Trichlorobenzene	77613
1,2,3-Trichloropropane	77443
1,2,4-Trichlorobenzene	34551
1,2,4-Trimethylbenzene	77222
1,2-Dibromo-3-Chloropropane	38760
1,2-Dichloroethane	34531
1,2-Dichloropropane	34541
1,3,5-Trimethylbenzene	77226
1,3-Dichloropropane	77173
1,3-Dichloropropene	34561
1,4-Dichloro-2-Butene	73547
1-Propanol	77018
2,2-Dichloropropane	77170
2,4,5-tp (Silvex)	39760
2,4,6-Trichlorophenol	34621
2,4-Dichlorophenol	34601
2,4-Dichlorophenoxyacetic Acid (2,4-D)	39730
2,4-Dimethylphenol	34606
2,4-Dinitrotoluene	34611
2,4-Dinitrophenol	34616
2,6-Dinitrotoluene	34626
2-Chloroethyl Vinyl Ether	34576
2-Chloronaphthalene	34581
2-Chlorophenol	34586
2-Hexanone	77103

LIST L2

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
2-Propanol (Isopropyl Alcohol)	81310
3,3-Dichlorobenzidine	34631
4,4-DDD	39310
4,4-DDE	39320
4,4-DDT	39300
4,6-Dinitro-O-Cresol	34657
4-Bromophenyl Phenyl Ether	34636
4-Chlorophenyl Phenyl Ether	34641
4-Methyl-2-Pentanone	78133
4-Nitrophenol	34646
Acenaphthene	34205
Acetone	81552
Alachlor	77825
Aldicarb	39053
Aldrin	39330
Alpha - BHC	39337
Aluminum	01105
Ammonia Nitrogen - N	00610
Anthracene	34220
Antimony	01097
Aroclor-1016	34671
Aroclor-1221	39488
Aroclor-1232	39492
Aroclor-1242	39496
Aroclor-1248	39500
Aroclor-1254	39504
Aroclor-1260	39508
Arsenic (total)	01002
Atrazine	39033
Bacteria (Fecal Coliform)	31616
Barium	01007
Benzene	34030
Benzo (a) Anthracene	34526
Benzo (a) Pyrene	34247
Benzo (b) Fluoranthene	34230
Benzo (ghi) Perylene	34521
Benzo (k) Fluoranthene	34242
Beryllium (total)	01012

LIST L2

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
Beta - BHC	39338
Bicarbonate	00425
Biochemical Oxygen Demand (BOD ₅)	00310
Bis (2-Chloro-1-Methylethyl) Ether	73522
Bis (2-Chloroethoxy) Methane	34278
Bis (2-Chloroethyl) Ether	34273
Bis (2-Ethylhexyl) Phthalate	39100
Bis(Chloromethyl)Ether	34268
Boron	01022
Bromobenzene	81555
Bromochloromethane	77297
Bromodichloromethane	32101
Bromoform	32104
Bromomethane	34413
Butanol	45265
Butyl Benzyl Phthalate	34292
Cadmium (total)	01027
Calcium	00916
Carbofuran	81405
Carbon Disulfide	77041
Carbon Tetrachloride	32101
Chemical Oxygen Demand (COD)	00335
Chlordane	39350
Chloride	00940
Chlorobenzene	34301
Chloroethane	34311
Chloroform	32106
Chloromethane	34418
Chromium	01034
Chrysene	34320
Cis-1,2-Dichloroethylene	77093
Cobalt	01037
Copper (total)	01042
Cyanide	00720
DDT	39370
Delta - BHC	46323
Di-N-Butyl Phthalate	39110
Di-N-Octyl Phthalate	34596

LIST L2

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
Dibenzo (a,h) Anthracene	34556
Dibromochloromethane	32105
Dibromomethane	77596
Dichlorodifluormethane	34668
Dieldrin	39380
Diethyl Phthalate	34336
Dimethyl Phthalate	34341
Endosulfan I	34361
Endosulfan II	34356
Endosulfan Sulfate	34351
Endrin	39390
Endrin Aldehyde	34366
Ethyl Acetate	81585
Ethylbenzene	78113
Ethylene Dibromide (EDB)	77651
Fluoranthene	34376
Fluorene	34381
Fluoride	00951
Heptachlor Epoxide	39420
Heptachlor	39410
Hexachlorobenzene	39700
Hexachlorobutadiene	39702
Hexachlorocyclopentadiene	34386
Hexachloroethane	34396
Ideno (1,2,3-cd) Pyrene	34403
Iodomethane	77424
Iron	01045
Isopropylbenzene	77223
Lead	01051
Lindane	39782
Magnesium	00927
Manganese	01055
Mercury	71900
Methoxychlor	39480
Methyl Chloride	34418
Methyl Ethyl Ketone	81595
Methylene Bromide	77596
Methylene Chloride	34423

LIST L2

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
Naphthalene	34696
Nickel	01067
Nitrate-Nitrogen	00620
Nitrobenzene	34447
Oil, Hexane Soluble (or Equivalent)	00550
Parathion	39540
Pentachlorophenol	39032
Phenanthrene	34461
Phenols	32730
Phosphorous	00665
Polychlorinated Biphenyls	39516
Potassium	00937
Pyrene	34469
Selenium	01147
Silver	01077
Sodium	00929
Styrene	77128
Sulfate	00945
Tert-Butylbenzene	77353
Tetrachlorodibenzo-p-Dioxins	34675
Tetrachloroethylene	34475
Tetrahydrofuran	81607
Thallium	01059
Tin	01102
Toluene	34010
Total Dissolved Solids (TDS)	70300
Total Organic Carbon (TOC)	00680
Total Suspended Solids	00530
Toxaphene	39400
Trans-1,2-Dichloroethylene	34546
Trans-1,3-Dichloropropene	34699
Trichloroethylene	39180
Trichlorofluoromethane	34488
Vinyl Acetate	77057
Vinyl Chloride	39175
Xylene	81551
Zinc	01092
m-Dichlorobenzene	34566

LIST L2

<u>Annual Leachate Monitoring Parameters</u>	<u>STORET</u>
m-Xylene	77134
n-Butylbenzene	77342
n-Nitrosodimethylamine	34438
n-Nitrosodiphenylamine	34433
n-Nitrosodipropylamine	34428
n-Propylbenzene	77224
o-Chlorotoluene	77275
o-Dichlorobenzene	34536
o-Nitrophenol	34591
o-Xylene	77135
p-Chlorotoluene	77277
p-Cresol	77146
p-Dichlorobenzene	34571
p-Isopropyltoluene	77356
p-Nitrophenol	34646
p-Xylene	77133
sec-Butylbenzene	77350

LIST L3

RCRA Parameters for Leachate and Condensate

<u>Ignitability</u>	<u>STORET</u>
Flashpoint, Pensky-Martens Closed Cup (°F)	00497
<u>Corrosivity</u>	
pH	00400
<u>Reactivity</u>	
Reactive Cyanide	99040
Reactive Sulfide	99042
<u>Toxicity (TCLP)</u>	
Arsenic	99012
Barium	99014
Cadmium	99016
Chromium	99018

LIST L3

RCRA Parameters for Leachate and Condensate

Chromium, Hexavalent	99019
Lead	99020
Mercury	99022
Selenium	99024
Silver	99026
Endrin	99028
Lindane	99030
Methoxychlor	99032
Toxaphene	99034
2,4-D	99036
2,4,5-TP Silvex	99038
Benzene	99128
Carbon tetrachloride	99050
Chlordane	99148
Chlorobenzene	99096
Chloroform	99149
o-Cresol	99150
m-Cresol	99151
p-Cresol	99152
Cresol	99153
1,4-Dichlorobenzene	99154
1,2-Dichloroethane	99155
1,1-Dichloroethylene	99156
2,4-Dinitrotoluene	99157
Heptachlor (and its epoxide)	99158
Hexachlorobenzene	99159
Hexachloro-1, 3-Butadiene	99160
Hexachloroethane	99161
Methyl Ethyl Ketone	99060
Nitrobenzene	99062
Pentachlorophenol	99064
Pyridine	99066
Tetrachloroethylene	99068
Trichloroethylene	99076
2,4,5-Trichlorophenol	99078
2,4,6-Trichlorophenol	99080
Vinyl Chloride	99162

Notes for all leachate monitoring parameters:

- a. Flashpoint shall be reported in degrees Fahrenheit. The parameters for reactivity and toxicity shall be reported in parts per million.
 - b. The permittee shall obtain metals and organics analysis. Either procedure may be utilized (i.e., total or TCLP), but any constituent whose total concentration exceeds the TCLP limit specified in 35 IAC, Section 721.124 must be analyzed using the TCLP test and the results reported, unless an alternative test has been approved by the Agency. TCLP test methods must be in accordance with SW 846-1311.
 - c. The test methods for leachate monitoring shall be those approved in the USEPA's Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), Third Edition or the equivalent thereof.
 - d. All parameters shall be determined from unfiltered samples.
6. The schedule for leachate sample collection and submission of quarterly monitoring results is as follows:

<u>Sampling Quarter</u>	<u>Sampling List</u>	<u>Report Due Date</u>
Jan-Feb (1st)	L301-L306 List L1	April 15
April-May (2nd)	L301-L306 List L1	July 15
	L301-L306 List L2	July 15
	L301-L306 List L3	July 15
July-Aug (3rd)	L301-L306 List L1	October 15
Oct-Nov (4th)	L301-L306 List L1	January 15

L1 - Routine Leachate Parameters

L2 - Annual Leachate Parameters

L3 - Annual TCLP Leachate Parameters

Level measurements should be reported quarterly for P301-P303

7. Pursuant to 35 IAC, Section 811.309(g)(1), any chemical constituent in List L1 that is not detected in the leachate may be deleted from List L1. However, if subsequently in annual monitoring that constituent is detected, it shall be added back to List L1. All changes to the leachate parameter lists must be approved by the Agency through the permit process.

VIII. GROUNDWATER MONITORING

1. The groundwater monitoring program must be capable of determining background groundwater quality hydraulically upgradient of and unaffected by the units and to detect, from all potential sources of discharge, any releases to groundwater within the facility. This Agency reserves the right to require installation of additional monitoring wells as may be necessary to satisfy the requirements of this permit.
2. The groundwater monitoring wells shall be constructed and maintained in accordance with the requirements of 35 Ill. Adm. Code, 811.318(d) and designs approved by the Agency.
3. Groundwater monitoring wells shall be installed in the locations shown in revised Figure V-6-1 of Attachment 8 of the Addendum, received on August 8, 1996 to the permit application, Log No. 1995-060 and screened in the hydrogeologic unit(s) identified as potential contaminant pathway(s) within the zone of attenuation. All wells as listed in Condition V.9 must be installed so that samples may be taken during the months of January - February and the results submitted to the Agency by April 15, 1997.
4. Within 60 days of installation of any groundwater monitoring well, boring logs compiled by a qualified geologist, well development data and as-built diagrams shall be submitted to the Agency utilizing the enclosed "Well Completion Report" form. For each well installed pursuant to this permit, one form must be completed.
5. Groundwater monitoring wells shall be easily visible, labelled with their Agency monitoring point designations and fitted with padlocked protective covers.
6. In the event that any well becomes consistently dry or unserviceable and therefore requires replacement, a replacement well shall be installed within ten (10) feet of the existing well. The Agency shall be notified in writing at least 15 days prior to the installation of all replacement wells. A replacement well that is more than ten feet from the existing well or which does not monitor the same geologic zone is considered to be a new well and must be approved via a significant modification permit.
7. All borings, wells and piezometers not used as monitoring points shall be abandoned in accordance with the standards in 35 Ill. Adm. Code 811.316, and the decommissioning and reporting procedures contained in the Illinois Department of Public Health's (IDPH) Water Well Construction Code, 77 Ill. Adm. Code, Part 920 (effective 1/1/92). In the event specific guidance is not provided by IDPH procedures, the enclosed IEPA monitoring well plugging procedures shall be followed.

8. Groundwater sampling and analysis shall be performed in accordance with the requirements of 35 Ill. Adm. Code 811.318(e) and the specific procedures and methods approved by the Agency.
9. The following monitoring points are to be used in the groundwater detection monitoring program for this facility:

Upgradient Wells

<u>Applicant Designation</u>	<u>Agency Designation</u>
GA1S	G31S
RA3S	G33S
GA4S	G34S
GA5S	G35S
G15D	G36D

Wells Within Zone of Attenuation

<u>Applicant Designation</u>	<u>Agency Designation</u>
G13D	G13D
G21D	G21D
G22D	G22D
G23D	G23D
G24D	G24D
GA4D	G34D
GA5D	G35D
GA11D	G41D
RA14S	G13S
RA6S	G26S
RA16S	G36S
GA7S	G37S

Compliance Boundary Well(s)

<u>Applicant Designation</u>	<u>Agency Designation</u>
*G20D	*G20D

*Note: G20D will be located within 5 feet of the property boundary at the southern edge of the facility.

Piezometers

<u>Applicant Designation</u>	<u>Agency Designation</u>
P19D	(-)P19D
PA6D	P26D
PA1D	P31D
PA2S	(-)P32S
PA2D	(-)P32D
PA3D	P33D
PA7D	P37D
PA12S	P41S

(-)Note: Piezometers to be abandoned.

10. The monitoring program, approved by Permit No.1995-060, shall continue for a minimum period of 30 years after closure and shall not cease until the conditions described in 35 Ill. Adm. Code, 811.319(a)(1)(C) have been achieved. The operator shall collect samples from all of the monitoring points listed in Condition V.9, test the samples for the parameters listed in Condition V.12 (Lists G1 and G2), and report the results to this Agency, all in accordance with the schedule in Condition V.17.
11. The applicable groundwater quality standards (AGQS) and the maximum allowable predicted concentrations (MAPC), as listed in Condition 12 below, are subject to the following conditions:
 - a. Temperature and the field parameters involving depth or elevation are not considered groundwater constituents and do not need AGQS.
 - b. For constituents which have not been detected in the groundwater, the practical quantitation limit (PQL) shall be used as the AGQS.
 - c. MAPCs are only applicable to those wells within the zone of attenuation.
 - d. AGQS are only applicable to upgradient/background and compliance boundary wells.
12. AGQS and MAPC values must be determined for all of the parameters which appear in either Lists G1 or G2 (not including groundwater depth or elevations). The AGQS values shall be calculated using four (4) consecutive quarters of groundwater monitoring data and employing the statistical method described in Section 6.3.2.3 of Attachment 8 of the Addendum (received August 8, 1996) to the application, Log No.

1995-060. Tables V-6-3 and V-6-7, containing the AGQS/MAPC values for the shallow and deep zones have been incorporated into this permit as Attachments A and B, respectively.

The applicant shall establish the intrawell AGQS/MAPC values for the downgradient wells (RA6S, GA7S, RA14S, and RA16S) by sampling all four of the wells for the parameters of List G2 on a one time basis. The applicant shall establish the intrawell AGQS/MAPC values for the downgradient wells (RA6S, GA7S, RA14S, and RA16S) by sampling all four of the wells for the parameters of List G2 on a one time basis. The permittee shall evaluate the data and propose the specific method and well(s) that will be used to collect the remaining three quarters of data and to determine the final intrawell AGQS values for the four wells. The permittee shall use the most conservative method(s) when selecting the well or wells to establish the final AGQS/MAPC values at the shallow downgradient wells. This evaluation and proposal shall be submitted to the Agency as an application for significant modification of permit by February 1, 1997.

LIST G1 (Groundwater - Quarterly)

<u>FIELD PARAMETERS</u>	<u>STORETS</u>	<u>MAPC</u>	<u>AGQS</u>
pH	00400		
Specific Conductance	00094		
Temperature of Water Sample (° F)	00011	----	----
Depth to Water (ft. below land surface)	72019	----	----
Depth to Water (ft. below measuring point)	72109	----	----
Elevation of Measuring Point (Top of casing ft. MSL)	72110	----	----
Elevation of Groundwater Surface (ft. MSL)	71993	----	----
Elevation of Bottom of Well (ft. MSL)	72020	----	----
<u>INDICATOR PARAMETERS</u>	<u>STORETS</u>	<u>MAPC</u>	<u>AGQS</u>
Ammonia (as Nitrogen; Dissolved) mg/L	00608		
Arsenic (Dissolved) ug/L	01000		
Boron (Dissolved) ug/L	01020		
Cadmium (Dissolved) ug/L	01025		
Chloride (Dissolved) mg/L	00941		
Cyanide (Total) mg/L	00720		

LIST G1 (Groundwater - Quarterly)

Iron (Dissolved) ug/L	01046
Lead (Dissolved) ug/L	01049
Manganese (Dissolved) ug/L	01056
Mercury (Dissolved) ug/L	71890
Nitrate (as Nitrogen, Dissolved) mg/L	00618
Phenols (Total Recoverable) ug/L	32730
Sulfate (Dissolved) mg/L	00946
Total Dissolved Solids (TDS, 180°C; Dissolved) mg/L	70300
Total Organic Carbon (TOC; Total) mg/L	00680
Zinc (Dissolved) ug/L	01090

NOTE:

- i. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.
- ii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.

LIST G2 (Groundwater - Annual)

<u>PARAMETERS</u> (ug/L)	<u>STORETS</u>	<u>MAPC</u>	<u>AGQS</u>
<u>UNFILTERED</u> (totals)			
Acetone	81552		
Acrolein	34210		
Acrylonitrile	34215		
# Alachlor	77825		
# Aldicarb	39053		
@ Aldrin	39330		
Aluminum	01105		
Ammonia (as N) (mg/L)	00610		
# Antimony	01097		
# Arsenic	01002		
# Atrazine	39033		
# Barium	01007		
# Benzene	34030		
# Benzo(a)Pyrene	34247		

LIST G2 (Groundwater - Annual)

# Beryllium	01012
BOD (mg/L)	00310
# Boron	01022
*Bromobenzene	81555
*Bromochloromethane (chlorobromomethane)	77297
*Bromodichloromethane	32101
*Bromoform (Tribromomethane)	32104
*Bromomethane (Methyl Bromide)	34413
*n-Butylbenzene	77342
*sec-Butylbenzene	77350
*tert-Butylbenzene	77353
# Cadmium	01027
Calcium (mg/L)	00916
# Carbofuran	81405
Carbon Disulfide	77041
# Carbon Tetrachloride	32102
Chemical Oxygen Demand (COD) (mg/L)	00335
# Chlordane	39350
# Chloride (mg/L)	00940
#*Chlorobenzene	34301
*Chloroethane (Ethyl Chloride)	34311
*Chloroform (Trichloromethane)	32106
*Chloromethane (Methyl Chloride)	34418
bis(chloromethyl)Ether	34268
*o-Chlorotoluene	77275
*p-Chlorotoluene	77277
# Chromium	01034
*Chlorodibromomethane (Dibromochloromethane)	32105
# Cobalt	01037
# Copper	01042
p-Cresol	77146
# Cyanide (mg/L)	00720
# Dalapon	38432
@ DDT	39370
*Dibromomethane (Methylene Bromide)	77596
*m-Dichlorobenzene (1,3 Dichlorobenzene)	34566
#*o-Dichlorobenzene (1,2 Dichlorobenzene)	34536
# p-Dichlorobenzene (1,4 Dichlorobenzene)	34571
*Dichlorodifluoromethane	34668
#*Dichloromethane (Methylene Chloride)	34423

LIST G2 (Groundwater - Annual)

@ Dieldrin	39380
Diethyl Phthalate	34336
Dimethyl Phthalate	34341
Di-N-Butyl Phthalate	39110
# Dinoseb (DNBP)	81287
# Endothall	38926
# Endrin	39390
# Di(2-Ethylhexyl)Phthalate	39100
*Ethylbenzene	78113
*Ethylene Dibromide (EDB)(1,2-Dibromo ethane)	77651
# Fluoride (mg/L)	00951
# Heptachlor	39410
# Heptachlor Epoxide	39420
*Hexachlorobutadiene	39702
# Hexachlorocyclopentadiene	34386
Iodomethane (Methyl Iodide)	77424
# Iron	01045
Isophorone	34408
*Isopropylbenzene	77223
*p-Isopropyltoluene	77356
# Lead	01051
# Lindane	39782
Magnesium (mg/L)	00927
# Manganese	01055
# Mercury	71900
# Methoxychlor	39480
*Naphthalene	34696
# Nickel	01067
# Nitrate-Nitrogen (mg/L)	00620
@ Oil(Hexane-Soluble or Equivalent) (mg/L)	00550
@ Parathion	39540
# Pentachlorophenol	39032
pH	00400
# Phenols	32730
# Picloram	39720
# Polychlorinated Biphenyls	39516
Potassium (mg/L)	00937
*n-Propylbenzene	77224
# Selenium	01147
# Silver	01077

LIST G2 (Groundwater - Annual)

# Simazine	39055
Sodium (mg/L)	00929
#*Styrene	77128
# Sulfate (mg/L)	00945
# TDS (Dried at 180°, mg/L)	70300
TOC (mg/L)	00680
#*Tetrachloroethylene (Perchloroethylene)	34475
Tetrahydrofuran	81607
# Thallium	01059
#*Toluene	34010
# Toxaphene	39400
# Trichloroethylene (Trichloroethene)	39180
*Trichlorofluoromethane	34488
Vanadium	01087
# Vinyl Chloride	39175
Vinyl Acetate	77057
# Xylenes	81551
*m-Xylene	77134
*o-Xylene	77135
*p-Xylene	77133
# Zinc	01092
*1,1,1,2-Tetrachloroethane	77562
# 1,1,1-Trichloroethane (Methylchloroform)	34506
*1,1,2,2-Tetrachloroethane	34516
#*1,1,2-Trichloroethane	34511
*1,1-Dichloroethane	34496
# 1,1-Dichloroethylene	34501
*1,1-Dichloropropene	77168
*1,2,3-Trichlorobenzene	77613
*1,2,3-Trichloropropane	77443
#*1,2,4-Trichlorobenzene	34551
*1,2,4-Trimethylbenzene	77222
#*1,2-Dibromo-3-Chloropropane (DBCP)	38760
#*cis-1,2-Dichloroethylene	77093
#*trans-1,2-Dichloroethylene	34546
# 1,2-Dichloroethane	34531
#*1,2-Dichloropropane (Propylene Dichloride)	34541
*1,3,5-Trimethylbenzene	77226
*1,3-Dichloropropane	77173
*1,3-Dichloropropene	34561

LIST G2 (Groundwater - Annual)

cis-1,3-Dichloropropene	34704
trans-1,3-Dichloropropene	34699
trans-1,4-Dichloro-2-Butene	73547
*2,2-Dichloropropane	77170
# 2,4,5-TP (Silvex)	39760
# 2,4-Dichlorophenoxyacetic Acid (2,4-D)	39730
2-Butanone(Methyl Ethyl Ketone)	81595
2-Hexanone (Methyl Butyl Ketone)	77103
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	78133

NOTE:

- i. All parameters with the "(Dissolved)" label to the right shall be determined using groundwater samples which have been filtered through a 0.45 micron filter. All other parameters shall be determined from unfiltered samples.
 - ii. Maximum allowable predicted concentrations (MAPCs) and applicable groundwater quality standards (AGQS) are given in ug/L except as otherwise noted. Also, the monitoring results should be reported in ug/L units unless otherwise indicated.
 - iii. The preceding list of parameters (G2) includes all those found in Attachment 1 to Appendix C to LPC-PA2. The 51 constituents from 40 CFR 141.40 and the parameters from 35 Ill. Adm. Code 620.410 and the parameters from 35 Ill. Adm. Code 302, designated with (*), (#) and (@) respectively are required to be monitored annually and may not be deleted.
13. Pursuant to 35 Ill. Adm. Code, 811.319(a)(4)(A), any of the following events shall constitute an observed increase only if the concentrations of the constituents monitored can be measured at or above the practical quantitation limit (PQL):
- a. The concentration of any constituent in List G1 of Condition V.12 shows a progressive increase over four (4) consecutive quarters.
 - b. The concentration of any constituent monitored in accordance with List G1 or List G2 of Condition V.12 exceeds the MAPC at an established monitoring point within the zone of attenuation.
 - c. The concentration of any organic constituent in List G2, monitored in accordance with Condition V.12 exceeds the preceding measured concentration at any established point.

- d. The concentration of any constituent monitored at or beyond the edge of the zone of attenuation (compliance boundary) exceeds its AGQS, or pursuant to 811.320(d)(1) any constituent monitored at an upgradient well, exceeds its AGQS.
14. For each round of sampling described in Condition 10 of this Section, the operator must determine if an observed increase has occurred within 45 days of the date the samples were collected. If an observed increase is identified, the operator must also notify the Agency in writing within 10 days and follow the confirmation procedures of 35 Ill. Adm. Code, 811.319(a)(4)(B). Furthermore, the operator must complete the confirmation procedures within 90 days of the initial sampling event.
15. Within 90 days of confirmation of any monitored increase, the operator shall submit a permit application for a significant modification to begin an assessment monitoring program in order to determine whether the solid waste disposal facility is the source of the contamination and to provide information needed to carry out a groundwater impact assessment in accordance with 35 Ill. Adm. Code 811.319(b).
16. The first quarterly statistical evaluations shall be performed on groundwater samples taken during the months of January - February and the results submitted to the Agency by April 15, 1996.
17. The schedule for sample collection and submission of quarterly monitoring results is as follows:

<u>Sampling Quarter</u>	<u>Sampling Due</u>	<u>Report Due Date</u>
Jan-Feb (1st)	List G1	April 15
April-May (2nd)	List G1 and G2	July 15
July-Aug (3rd)	List G1	October 15
Oct-Nov (4th)	List G1	January 15

G1 - Routine Groundwater Parameters
G2 - Annual Groundwater Parameters

18. Elevation of stick-up is to be surveyed and reported to the Agency:
 - a. When the well is installed (with the as-built diagrams),
 - b. Every two years thereafter, or
 - c. Whenever there is reason to believe that the elevation has changed.

19. Annually, the operator shall prepare an evaluation of the groundwater flow direction and the hydraulic gradients at the facility using the groundwater surface elevations (Storet #71993) determined for each monitoring event. This assessment shall be submitted with the monitoring results due on July 15.
20. All monitoring points shall be maintained in accordance with the approved permit application such that the required samples and measurements may be obtained.
21. Background concentrations which exhibit a statistically significant change shall be adjusted and updated in accordance with 35 Ill. Adm. Code 811.320(d)(1) and submitted to the Agency as a permit modification.
22. The permittee shall provide site-specific field hydraulic conductivity values at two locations in each of the Dolton Sand and the Silurian dolomite aquifer to verify the laboratory hydraulic conductivity values presented in Table V-2-3 of Attachment 7 of Volume I of the Addendum to Application Log No. 1995-060. This data shall be submitted to the Agency as an application for significant modification of permit by February 1, 1997.
23. Leachate head shall be maintained below the Dolton Sand groundwater head levels at the permit site. The leachate levels determined in Condition VII.4 shall be monitored and compared quarterly to the groundwater levels in the corresponding Dolton Sand groundwater monitoring wells and submitted in the annual report due July 15th. If leachate head levels exceed the groundwater levels in any quarter, corrective measures shall be initiated so that the inward gradient is re-established by the next quarterly monitoring event. If an inward gradient is not achieved by the next quarterly monitoring event, a permit application proposing corrective action shall be submitted within 35 days.

IX. LANDFILL GAS MANAGEMENT/MONITORING

1. The landfill gas monitoring plan described in Application Log No. 1995-060 is approved. The gas monitoring probes within the waste boundary described in Application Log No. 1995-060 shall be installed and put into service within ninety days after final cover has been applied to the various areas where they are located.
2. The gas monitoring probes both inside and outside the waste boundary shall be monitored for the following parameters:
 - a. Methane;
 - b. Pressure;
 - c. Nitrogen*;

- d. Oxygen; and
- e. Carbon Dioxide

*NOTE: For routine monitoring, Nitrogen may be reported as the net remaining volume fraction after the other measured constituents have been accounted for.

3. The ambient air monitoring devices described in the Application Log No. 1995-060 shall be used to test the air downwind of the landfill for methane.
4. All buildings within the facility boundaries shall be monitored continuously for methane.
5. Gas monitoring shall begin immediately, shall continue for at least 30 years after closure and may be discontinued only after the conditions described in 35 IAC, Section 811.310(c)(4) have been achieved.
6. Sampling and testing of the gas monitoring probes and ambient air monitoring shall be performed at least monthly throughout the remaining operating life and during the first five years after its closure of the unit. Then during the remainder of the post-closure care period, this monitoring frequency may be reduced to quarterly.
7. In the event of any of the occurrences listed below, the operator shall, within 180 days of the occurrence, submit to the Agency an application for a significant modification either proposing a gas collection/management system or demonstrating that the facility is not the cause of the occurrence.
 - a. A methane concentration greater than 50 percent of the explosive limit in air is detected in any of the below ground monitoring devices outside the waste boundary;
 - b. A methane concentration greater than 50 percent of the explosive limit in air is detected during ambient air monitoring;
 - c. A methane concentration greater than 25 percent of the explosive limit in air is detected in any building on or near the facility; or
 - d. Malodors attributed to the unit are detected beyond the property boundary.
8. The gas probes shall be inspected at least monthly for structural integrity and proper operation.

9. The results from gas monitoring for each calendar year shall be submitted to the Agency in the annual report required by 35 IAC, Section 813.501.
10. At the end of the post-closure care period, the gas monitoring probes shall be decommissioned. The probes outside the waste boundary shall be decommissioned using the method described in the enclosed Agency monitoring well plugging procedure guidance. In decommissioning the probes within the waste boundaries, the pipes shall be cut off at least two (2) feet below the low permeability layer and plugged. Then the low permeability layer, the protective layer and the vegetation shall be restored in the excavated areas.

X. CLOSURE/POST CLOSURE CARE AND FINANCIAL ASSURANCE

1. The facility shall be closed in accordance with the closure plan in Application Log No. 1995-060. The closure plan includes a plan for temporary suspension of waste acceptance. Upon completion of closure activities, the operator shall notify the Agency that the site has been closed in accordance with the approved closure plan utilizing the Agency's "Affidavit for Certification of Completion of Closure of Non-Hazardous Waste Facilities."
2. Inspections of the closed landfill shall be conducted in accordance with the approved post-closure care plan in Application Log No. 1995-060. Records of field investigations, inspections, sampling and corrective action taken are to be maintained at the site and made available to IEPA personnel. During the post-closure care period, these records are to be maintained at the office of the site operator.
3. If necessary, the soil over the entire planting area shall be amended with lime, fertilizer and/or organic matter. On sideslopes, mulch or some other form of stabilizing material is to be provided to hold seed in place and conserve moisture.
4. When the post-closure care period has been completed, the operator shall notify the Agency utilizing the Agency's "Affidavit for Certification of Completion of Post-Closure Care for Non-Hazardous Waste Facilities."
5. The operator shall provide financial assurance for closure and post-closure care pursuant to 35 IAC, Section 811.700(b). However, financial assurance shall be required only for those areas for which authorization to operate has been obtained or is being requested.
6. The total cost estimate for closure and post closure care for this facility approved by this permit is \$1,240,617.00. This includes discounting of the post closure care costs. Financial assurance shall be provided in this amount within 90 days. Financial

assurance must be revised to the total for undiscounted closure costs by the effective date for RCRA Subtitle D financial assurance. The current effective date is April 9, 1997.

7. The operator shall increase the total amount of financial assurance so as to equal the current cost estimate within 90 days of an increase in the current cost estimate in accordance with 35 IAC, 811.701(b).
8. The owner or operator shall adjust the cost estimates for closure, post-closure, and corrective action for inflation on an annual basis during the following time periods:
 - a. The active life of the unit for the closure cost;
 - b. The active life and post-closure care period for the post-closure cost; or
 - c. Until any corrective action program is completed in accordance with 35 IAC, Section 811.326, for the cost of corrective action.

If there are no changes to the cost estimates, certification for the above shall be provided to the Agency in the annual report. Any increase to the cost estimates shall be submitted as an application for significant modification to the permit, and shall be due the same time as the annual report.

XI. REPORTING REQUIREMENTS

1. Within ninety (90) days of issuance of this permit, the operator shall submit to this Agency one map of the facility with a scale no smaller than one (1) inch equals 200 feet. This map shall show:
 - a. The facility boundaries;
 - b. The permitted waste boundaries of the unit;
 - c. All on-site buildings; and
 - d. All groundwater, leachate and gas monitoring points for the unit.

Each monitoring point shall be labeled on the map with its Agency designation. The designations provided in this permit letter by the Agency shall be used for the leachate and groundwater monitoring points. The gas monitoring points shall be labeled using a logical nomenclature developed by the operator or the consultant.

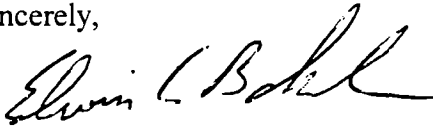
2. The annual report for each calendar year shall be submitted to the Agency by May 1 of the following year pursuant to 35 IAC, Section 813.501. The first annual report shall be for the period from the date of issuance of this permit through the end of the calendar year. The annual report shall include:
 - a. A waste volume summary which includes:
 - i. Total volume of solid waste accepted at the facility during the past year in cubic yards as measured at the gate;
 - ii. The remaining solid waste capacity in the unit in cubic yards as measured at the gate; and
 - iii. A copy of all identification reports required under 35 IAC, Section 811.404.
 - b. Monitoring data from the leachate collection system, groundwater monitoring network, and gas monitoring system including:
 - i. Graphical results of monitoring efforts;
 - ii. Statistical summaries and analysis of trends;
 - iii. Changes to the monitoring program; and
 - iv. Discussion of error analysis, detection limits and observed trends.
 - c. Proposed activities for the upcoming year including:
 - i. Amount of waste expected, in cubic yards;
 - ii. Structures to be built; and
 - iii. New monitoring stations to be installed.
 - d. The signature of the operator or duly authorized agent as specified in 35 IAC, Section 812.104.
3. In addition to the annual report, the quarterly reports on groundwater and leachate monitoring shall be submitted to the Agency in accordance with the schedules described in Conditions VII.6. and VIII.17, pursuant to 35 IAC, Section 813.502.

4. The original and two (2) copies of all certifications, logs, reports and plan sheets and three (3) copies of groundwater monitoring chemical analysis forms which are required to be submitted to the Agency by the permittee should be mailed to the following address:

Illinois Environmental Protection Agency
Planning and Reporting Section
Division of Land Pollution Control -- #24-S
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

Within 35 days of the date of mailing of the Agency's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Agency, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed ninety days by written notice provided to the Board from the applicant and the Agency within the 35-day initial appeal period.

Sincerely,



Edwin C. Bakowski, P.E.
Manager, Permit Section
Bureau of Land

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ECB:RRS:bjh\96741S.WPD *Kv-L*
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Attachments A and B: MAPC Values

- Enclosures:
1. Special Waste Preacceptance Form
(Profile Identification Sheet)
 2. Annual Generator Special Waste Recertification for Disposal of Special Waste
 3. Well Completion Report Form
 4. IEPA Monitoring Well Plugging Procedure
 5. Chemical Analysis Form and Instructions
 6. Affidavit for Certification of Completion of Closure of Non-Hazardous Waste Facilities

cc: Neil Williams, P.E., w/Attachments A & B
City of Chicago, Department of the Environment, w/Attachments A & B

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1979

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

These standard conditions shall apply to all permits which the Agency issues for construction or development projects which require permits under the Divisions of Water Pollution Control, Air Pollution Control, Public Water Supplies, and Land and Noise Pollution Control. Special conditions may also be imposed by the separate divisions in addition to these standard conditions.

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire two years after date of issuance unless construction or development on this project has started on or prior to that date.
2. The construction or development of facilities covered by this permit shall be done in compliance with applicable provisions of Federal laws and regulations, the Illinois Environmental Protection Act, and Rules and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification of the project, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
4. The permittee shall allow any agent duly authorized by the Agency upon the presentation of credentials:
 - a. to enter at reasonable times the permittee's premises where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit.
 - b. to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit.
 - c. to inspect at reasonable times, including during any hours of operation of equipment constructed or operated under this permit, such equipment or monitoring methodology or equipment required to be kept, used, operated, calibrated and maintained under this permit.

- d. to obtain and remove at reasonable times samples of any discharge or emission of pollutants.
 - e. to enter at reasonable times and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
- 5. The issuance of this permit:
 - a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located;
 - b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities;
 - c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations;
 - d. does not take into consideration or attest to the structural stability of any units or parts of the project;
 - e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6. Unless a joint construction/operation permit has been issued, a permit for operating shall be obtained from the Agency before the facility or equipment covered by this permit is placed into operation.
- 7. These standard conditions shall prevail unless modified by special conditions.
- 8. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:
 - a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed; or
 - b. upon finding that any standard or special conditions have been violated; or
 - c. upon any violation of the Environmental Protection Act or any Rule or Regulation effective thereunder as a result of the construction or development authorized by this permit.

122nd Street Landfill AGQSs and MAPCs for Shallow Zone (Upgradient Wells)

PARAMETER	ND GW	ND LC	UNITS	PQL	35 IAC 620 STDS		Co	MPC	99% CL = AGQS = MAPC			
					Class I	Class II			GA1S	GA4S	GA3S	GA5S
1,1,1,2-tetrachloroethane	x	x	ug/L	5					5	5	5	5
1,1,1-trichloroethane		x	ug/L	5	200	1000			6	6	6	6
1,1,2,2-tetrachloroethane	x	x	ug/L	5					5	5	5	5
1,1,2-trichloroethane	x	x	ug/L	5					5	5	5	5
1,1-dichloroethane			ug/L	5			2.6	2.6E-06	12	12	12	12
1,1-dichloroethene		x	ug/L	5	7	35			6	6	6	6
1,1-dichloropropane	x	x	ug/L	5					5	5	5	5
1,2,3-trichlorobenzene	x	x	ug/L	5					5	5	5	5
1,2,3-trichloropropane	x	x	ug/L	5					5	5	5	5
1,2,4-trichlorobenzene	x		ug/L	5			52	5.2E-05	5	5	5	5
1,2,4-trimethylbenzene		x	ug/L	5					141	141	141	141
1,2-dibromo-3-chloropropane	x	x	ug/L	5					5	5	5	5
1,2-dichloroethane	x	x	ug/L	5	5	25			5	5	5	5
1,2-dichloropropane	x	x	ug/L	5	5	25			5	5	5	5
1,3,5-trimethylbenzene			ug/L	5			12	1.2E-05	29	29	29	29
1,3-dichloropropane	x	x	ug/L	5					5	5	5	5
1,4-dichloro-2-butene	x	x	ug/L	5					5	5	5	5
2,2-dichloropropane	x	x	ug/L	5					5	5	5	5
2,4,5-TP (Silvex)	x		ug/L	2	50	250	0.18	1.8E-07	2	2	2	2
2,4-D	x	x	ug/L	10	70	350			10	10	10	10
2-butanone (methyl ethyl ketone)	x		ug/L	10			44	4.4E-05	10	10	10	10
2-hexanone		x	ug/L	50					36	36	36	36
4-methyl-2-pentanone (MIBK)			ug/L	10			14	1.4E-05	10	10	10	10
DOD			ug/L				2000	2.0E-03	168746	1244644	162202	126503
DDT	x	x	ug/L	10					10	10	10	10
IDS**			ug/L		1200000	1200000	16063333	1.6E+01	12630590	4337294	3245271	80988110
TOC			ug/L				832400	8.3E-01	575910	306359	169922	354361
acetone			ug/L	10			51	5.1E-05	77	77	77	77
acrolein	x	x	ug/L	100					100	100	100	100
acrylonitrile	x	x	ug/L	100					100	100	100	100
alachlor	x	x	ug/L		2	10			10*	10*	10*	10*
aldicarb	x	x	ug/L		3	15			12.5*	12.5*	12.5*	12.5*
aldrin	x	x	ug/L						0.5*	0.5*	0.5*	0.5*
alkalinity			ug/L				5125000	5.1E+00	8651629	3270198	2512876	2811235
aluminum, dissolved	x		ug/L						265	265	265	265
aluminum, total			ug/L				337	3.4E-04	17989	17989	17989	17989
ammonia (as N), dissolved**			ug/L				605333	6.1E-01	1804605	1579102	51278	150436
ammonia (as N), total			ug/L						4Q	4Q	4Q	4Q

122nd Street Landfill AGQSs and MAPCs for Shallow Zone (Upgradient Wells)

PARAMETER	ND GW	ND LC	UNITS	PQL	35 IAC 620 STDS		Co	MPC	99% CL = AGQS = MAPC			
					Class I	Class II			GA1S	GA4S	GA3S	GA5S
antimony, total	x	x	ug/L	30					30	30	30	30
arsenic, dissolved**			ug/L						21	2Q	2Q	2Q
arsenic, total			ug/L	10	50	200	24	2.4E-05	27	27	27	27
atrazine	x	x	ug/L		3	15			10*	10*	10*	10*
barium, dissolved			ug/L						995	995	995	995
barium, total			ug/L	0.02	2	2	638	6.4E-04	1898	1898	1898	1898
benzene			ug/L	5	5	25	17	1.7E-05	864	864	864	864
beryllium, total	x		ug/L	3					3	3	3	3
bis (chloromethyl) ether	x	x	ug/L	1000					1000	1000	1000	1000
bis(2-ethylhexyl) phthalate			ug/L	10			71	7.1E-05	28	28	28	28
boron, dissolved**			ug/L						7659	2Q	2Q	2Q
boron, total			ug/L		2	2	12062	1.2E-02	9793	9793	9793	9793
bromobenzene	x	x	ug/L	5					5	5	5	5
bromochloromethane	x	x	ug/L	5					5	5	5	5
bromodichloromethane	x	x	ug/L	5					5	5	5	5
bromoform	x	x	ug/L	5					5	5	5	5
bromomethane	x	x	ug/L	10					10	10	10	10
cadmium, dissolved**	x		ug/L						50*	2Q	2Q	2Q
cadmium, total	x		ug/L	1	5	50	11	1.1E-05	1	1	1	1
calcium, dissolved			ug/L						385325	385325	385325	385325
calcium, total			ug/L				134500	1.3E-01	387205	387205	387205	387205
carboluran	x	x	ug/L	10	40	200			10	10	10	10
carbon disulfide	x	x	ug/L	100					100	100	100	100
carbon tetrachloride	x	x	ug/L	5	5	25			5	5	5	5
chemical oxygen demand			ug/L				3033333	3.0E+00	2031431	2031431	2031431	2031431
chlordane	x	x	ug/L	10	2	10			10	10	10	10
chloride, dissolved**			ug/L				6433400	6.4E+00	5589200	573904	772125	3185261
chloride, total			ug/L		200000	200000			4Q	4Q	4Q	4Q
chlorobenzene			ug/L	5	100	500	20	2.0E-05	6	6	6	6
chlorodibromomethane	x	x	ug/L	5					5	5	5	5
chloroethane			ug/L	5			12	1.2E-05	32	32	32	32
chloroform	x	x	ug/L	5					5	5	5	5
chloromethane	x	x	ug/L	10					10	10	10	10
chromium, dissolved			ug/L						133	133	133	133
chromium, total			ug/L	10	100	100	191	1.9E-04	126	126	126	126
cis-1,2-dichloroethene			ug/L	5	70	200	2.7	2.7E-06	10	10	10	10
cis-1,3-dichloropropene	x	x	ug/L	5					5	5	5	5
cobalt, dissolved			ug/L						28	28	28	28

122nd Street Landfill AGQs and MAPCs for Shallow Zone (Upgradient Wells)

PARAMETER	ND GW	ND LC	UNITS	PQL	35 IAC 620 STDS		Co	MPC	99% CL = AGQS = MAPC			
					Class I	Class II			GA1S	GA4S	GA3S	GA5S
cobalt, total			ug/L	10	1000	1000	14	1.4E-05	10	10	10	10
copper, total			ug/L	10	650	650	65	6.5E-05	96	96	96	96
cyanide, total**			ug/L	200	200	600	26	2.6E-05	40	19	129	12
di-n-butyl phthalate	x	x	ug/L	10					10	10	10	10
dibromomethane	x	x	ug/L	5					5	5	5	5
dichlorodifluoromethane	x	x	ug/L	5					5	5	5	5
dieldrin	x	x	ug/L	10					10	10	10	10
diethyl phthalate		x	ug/L	10					19	19	19	19
dimethyl phthalate	x	x	ug/L	10					10	10	10	10
endrin	x	x	ug/L	20					20	20	20	20
ethylbenzene		x	ug/L	5	700	1000			200	200	200	200
ethylene dibromide (EDB)	x	x	ug/L	5					5	5	5	5
fluoride			ug/L		4000	4000	4550	4.6E-03	2332	2332	2332	2332
heptachlor	x	x	ug/L	10	0.4	2			10	10	10	10
heptachlor epoxide	x	x	ug/L	10	0.2	1			10	10	10	10
hexachlorobutadiene	x	x	ug/L	10					10	10	10	10
iodomethane	x	x	ug/L	5					5	5	5	5
iron, dissolved**			ug/L						12064	2Q	2Q	2Q
iron, total			ug/L		5000	5000	3933	3.9E-03	167105	167105	167105	167105
isophorone	x	x	ug/L	10					10	10	10	10
isopropylbenzene (Cumene)			ug/L	5			5.5	5.5E-00	22	22	22	22
lead, dissolved**			ug/L						1Q	2Q	2Q	2Q
lead, total			ug/L	2	7.5	100	91	9.1E-05	407	407	407	407
lindane		x	ug/L	10	0.2	1			0.3	0.3	0.3	0.3
m-dichlorobenzene	x	x	ug/L	5					5	5	5	5
magnesium, dissolved			ug/L						290346	290346	290346	290346
magnesium, total			ug/L				455500	4.6E-01	299023	299023	299023	299023
manganese, dissolved**			ug/L						292604	2Q	2Q	2Q
manganese, total			ug/L		150	10000	537	5.4E-04	1422	1422	1422	1422
mercury, dissolved			ug/L						1	1	1	1
mercury, total		x	ug/L	2	2	10			1	1	1	1
methoxychlor	x	x	ug/L	10	40	200			10	10	10	10
methylene chloride			ug/L	5			6.0	6.0E-06	10	10	10	10
n-butylbenzene		x	ug/L	5					6	6	6	6
n-propylbenzene			ug/L	5			6	6.0E-06	26	26	26	26
naphthalene			ug/L	5			73	7.3E-05	47	47	47	47
nickel, dissolved			ug/L						305	305	305	305
nickel, total			ug/L	150	100	2000	253	2.5E-04	259	259	259	259

122nd Street Landfill AGQs and MAPCs for Shallow Zone (Upgradient Wells)

PARAMETER	ND GW	ND LC	UNITS	PQL	35 IAC 620 STDS		Co	MPC	99% CL = AGQS = MAPC			
					Class I	Class II			GA1S	GA4S	GA3S	GA5S
nitrate, dissolved**	x		ug/L				56	5.6E-05	500	500	500	500
nitrate, total			ug/L		10000	100000			4Q	4Q	4Q	4Q
o-chlorotoluene	x	x	ug/L	5					5	5	5	5
o-dichlorobenzene			ug/L	2			8.5	8.5E-06	6	6	6	6
oil (hexane soluble or equivalent)			ug/L				74250	7.4E-02	222943	222943	222943	222943
p-chlorotoluene	x		ug/L	5			3.1	3.1E-06	5	5	5	5
p-dichlorobenzene			ug/L	5	75	375	13	1.3E-05	7	7	7	7
p-isopropyltoluene (Cymene)			ug/L	5			11	1.1E-05	20	20	20	20
pH**			ug/L				7.5	7.5E-06	8.26	6.99	9.14	7.34
parathion	x	x	ug/L	10					10	10	10	10
pentachlorophenol	x	x	ug/L	50	1	5			50	50	50	50
phenol**			ug/L	10	100	100	97	9.7E-05	153	1Q	1Q	1Q
polychlorinated biphenyls (PCBs)	x		ug/L	200	5	25	8.6	8.6E-06	200	200	200	200
potassium, dissolved			ug/L						1050010	1050010	1050010	1050010
potassium, total			ug/L				601500	6.0E-01	855140	855140	855140	855140
sec-butylbenzene		x	ug/L	5					6	6	6	6
selenium, total	x	x	ug/L	20	50	50			20	20	20	20
silver, total	x		ug/L	10	50		36	3.6E-05	10	10	10	10
sodium, dissolved			ug/L						3989255	3989255	3989255	3989255
sodium, total			ug/L				4040000	4.0E+00	2824035	2824035	2824035	2824035
styrene		x	ug/L	10	100	500			5	5	5	5
sulfate, dissolved**			ug/L				114	1.1E-04	570276	742032	962996	3275204
sulfate, total			ug/L		400000	400000			4Q	4Q	4Q	4Q
tert-butylbenzene		x	ug/L	5					5	5	5	5
tetrachloroethylene		x	ug/L	5	5	25			5	5	5	5
tetrahydrofuran			ug/L	1E+06			296	3.0E-04	1852	1852	1852	1852
thallium, total	x	x	ug/L	10					10	10	10	10
toluene			ug/L	5	1000	2500	57	5.7E-05	1876	1876	1876	1876
toxaphene	x	x	ug/L	10	3	15			10	10	10	10
trans-1,2-dichloroethene			ug/L	5	100	500	2.7	2.7E-06	5	5	5	5
trans-1,3-dichloropropene	x	x	ug/L	5					5	5	5	5
trichloroethylene		x	ug/L	5	5	25			18	18	18	18
trichlorofluoromethane	x	x	ug/L	5					5	5	5	5
vanadium, dissolved			ug/L						50	50	50	50
vanadium, total			ug/L	40			25	2.5E-05	39	39	39	39
vinyl acetate	x	x	ug/L	10					10	10	10	10
vinyl chloride		x	ug/L	2	2	10			23	23	23	23
xylenes			ug/L	5	10000	10000	183	1.8E-04	758	758	758	758

122nd Street Landfill AGQSs and MAPCs for Shallow Zone (Upgradient Wells)

PARAMETER	ND GW	ND LC	UNITS	PQL	35 IAC 620 STDS		Co	MPC	99% CL = AGQS = MAPC			
					Class I	Class II			GA1S	GA4S	GA3S	GA5S
zinc, dissolved**			ug/L						30	20	20	20
zinc, total			ug/L	20	5000	10000	280	2.9E-04	1515	1515	1515	1515

NOTES:

ND GW = Not detected in ground water

ND LC = Not detected in leachate

99% CL = 99% Confidence Limit

Co = Average leachate concentration

MPC = Model predicted concentration. For Co equal to 1ug/L, MPC at the edge of the zone of attenuation equals 1×10^{-4} ug/L.

PQL = Practical Quantitation Limit

MAPC = Maximum Allowable Predicted Concentration

AGQS = Applicable Ground-Water Quality Standard

1Q = Data for one more quarter needed to establish background

2Q = Data for two more quarters needed to establish background

3Q = Data for three more quarters needed to establish background

4Q = Data for four quarters needed to establish background

99% CL of TDS, TOC, Sulfate, Chloride, and Sulfate based on data from 1988 to 1995

* Indicates parameter not detected and no established PQL so MAPC/AGQS set equal to 5 times the method detection limit.

** Indicates from IEPA List G1; other parameters are from IEPA List G2.

MAXIMUM ALLOWABLE PREDICTED CONCENTRATIONS AND
APPLICABLE GROUND-WATER QUALITY STANDARDS UPPERMOST AQUIFER
LAND AND LAKES 122ND STREET LANDFILL

PARAMETER	ND GW	ND LC	UNIT	99% CL	PQL	MAPC	AGQS	Co	MPC	35 IAC 620 STDS	
										Class I	Class II
1,1,1,2-tetrachloroethane	x	x	ug/l		5	5	5				
1,1,1-trichloroethane	x	x	ug/l		5	5	5			200	1000
1,1,2,2-tetrachloroethane	x	x	ug/l		5	5	5				
1,1,2-trichloroethane	x	x	ug/l		5	5	5				
1,1-dichloroethane	x		ug/l		5	5	5	2.6	2.6E-08		
1,1-dichloroethene	x	x	ug/l		5	5	5			7	35
1,1-dichloropropene	x	x	ug/l		5	5	5				
1,2,3-trichlorobenzene	x	x	ug/l		5	5	5				
1,2,3-trichloropropane	x	x	ug/l		5	5	5				
1,2,4-trichlorobenzene	x		ug/l		5	5	5	52	5.2E-07		
1,2,4-trimethylbenzene	x	x	ug/l		5	5	5				
1,2-dibromo-3-chloropropane	x	x	ug/l		5	5	5				
1,2-dichloroethane	x	x	ug/l		5	5	5			5	25
1,2-dichloropropane	x	x	ug/l		5	5	5			5	25
1,3,5-trimethylbenzene	x		ug/l		5	5	5	12	1.2E-07		
1,3-dichloropropane	x	x	ug/l		5	5	5				
1,4-dichloro-2-butene	x	x	ug/l		5	5	5				
2,2-dichloropropane	x	x	ug/l		5	5	5				
2,4,5-TP (Silvex)	x		ug/l		2	2	2	0.18	1.8E-09	50	250
2,4-D	x	x	ug/l		10	10	10			70	350
2-butanone (methyl ethyl ketone)	x		ug/l		10	10	10	44	4.4E-07		
2-hexanone	x	x	ug/l		50	50	50				
4-methyl-2-pentanone (MIBK)	x		ug/l		10	10	10	14	1.4E-07		
BOD			ug/l	35069		35069	35069	2000	2.0E-05		
DDT	x	x	ug/l		10	10	10				
TDS			ug/l	2189790		2189790	2189790	16063333	1.6E-01	1200000	1200000
TOC			ug/l	10554		10554	10554	832400	8.3E-03		
acetone	x		ug/l		10	10	10	51	5.1E-07		
acrolein	x	x	ug/l		100	100	100				
acrylonitrile	x	x	ug/l		100	100	100				

Attachment B

MAXIMUM ALLOWABLE PREDICTED CONCENTRATIONS AND
APPLICABLE GROUND-WATER QUALITY STANDARDS UPPERMOST AQUIFER
LAND AND LAKES 122ND STREET LANDFILL

PARAMETER	ND GW	ND LC	UNIT	99% CL	PQL	MAPC	AGQS	Co	MPC	35 IAC 620 STDS	
										Class I	Class II
alachlor	x	x	ug/l			10*	10*			2	10
aldicarb	x	x	ug/l			2.5*	2.5*			3	15
aldrin	x	x	ug/l			0.5*	0.5*				
alkalinity			ug/l	302310		302310	302310	5125000	5.1E-02		
aluminum, total			ug/l	19690		19690	19690	337	3.4E-06		
ammonia (as N), dissolved			ug/l	2597		2597	2597	605333	6.1E-03		
ammonia (as N), total			ug/l			4Q	4Q				
antimony, total	x	x	ug/l		30	30	30				
arsenic, dissolved	x		ug/l			2Q	2Q				
arsenic, total			ug/l	44	10	44	44	24	2.4E-07	50	200
atrazine	x	x	ug/l			10*	10*			3	15
barium, total			ug/l		0.02	2Q	2Q	638	6.4E-06	2	2
benzene	x		ug/l		5	5	5	17	1.7E-07	5	25
beryllium, total	x	x	ug/l		3	3	3				
bis (chloromethyl) ether	x	x	ug/l		1000	1000	1000				
bis(2-ethylhexyl) phthalate			ug/l	100	10	100	100	71	7.1E-07		
boron, dissolved			ug/l	2914		2Q	2Q	12062	1.2E-04	2	2
boron, total			ug/l			2Q	2Q				
bromobenzene	x	x	ug/l		5	5	5				
bromochloromethane	x	x	ug/l		5	5	5				
bromodichloromethane	x	x	ug/l		5	5	5				
bromoform	x	x	ug/l		5	5	5				
bromomethane	x	x	ug/l		10	10	10				
butyl benzyl phthalate	x		ug/l		5	5	5	25	2.5E-07		
cadmium, dissolved	x		ug/l			2Q	2Q				
cadmium, total	x		ug/l		1	2Q	2Q	11	1.1E-07	5	50
calcium, total			ug/l	186804		2Q	2Q	134500	1.3E-03		
carboluran	x	x	ug/l		10	10	10			40	200
carbon disulfide	x	x	ug/l		100	100	100				
carbon tetrachloride	x	x	ug/l		5	5	5			5	25

Attachment B

**MAXIMUM ALLOWABLE PREDICTED CONCENTRATIONS AND
APPLICABLE GROUND-WATER QUALITY STANDARDS UPPERMOST AQUIFER
LAND AND LAKES 122ND STREET LANDFILL**

PARAMETER	ND GW	ND LC	UNIT	99% CL	PQL	MAPC	AGQS	Co	MPC	35 IAC 620 STDS	
										Class I	Class II
chemical oxygen demand			ug/l	29539		29539	29539	3033333	3.0E-02		
chlordan	x	x	ug/l		10	10	10			2	10
chloride, dissolved			ug/l	755585		755585	755585	6433400		2000000	2000000
chloride, total			ug/l			4Q	4Q				
chlorobenzene	x		ug/l		5	5	5	20	2.0E-07	100	500
chloroethane	x		ug/l		5	5	5	12	1.2E-07		
chloroform	x	x	ug/l		5	5	5				
chloromethane	x	x	ug/l		10	10	10				
chromium, total	x		ug/l		10	2Q	2Q	191	1.9E-06	100	100
cis-1,2-dichloroethene	x		ug/l		5	5	5	3	2.7E-08	70	200
cis-1,3-dichloropropene	x	x	ug/l		5	5	5				
cobalt, total			ug/l	41	10	2Q	2Q	14	1.4E-07	1000	1000
copper, total			ug/l	139	10	2Q	2Q	65	6.5E-07	650	650
cyanide, total	x		ug/l		200	200	200	26	2.6E-07	200	600
di-n-butyl phthalate		x	ug/l	10	10	10	10				
dibromomethane	x	x	ug/l		5	5	5				
dichlorodifluoromethane	x	x	ug/l		5	5	5				
dieldrin	x	x	ug/l		10	10	10				
diethyl phthalate	x	x	ug/l		10	10	10				
dimethyl phthalate	x	x	ug/l		10	10	10				
endrin	x	x	ug/l		20	20	20				
ethylbenzene	x	x	ug/l		5	5	5			700	1000
fluoride			ug/l	1061		1061	1061	4550	4.6E-05	4000	4000
heptachlor	x	x	ug/l		10	10	10			0.4	2
heptachlor epoxide	x	x	ug/l		10	10	10			0.2	1
hexachlorobutadiene	x	x	ug/l		10	10	10				
iodomethane	x	x	ug/l		5	5	5				
iron, dissolved			ug/l			2Q	2Q				
iron, total			ug/l	101526		1Q	1Q	3933	3.9E-05	5000	5000
isophorone	x	x	ug/l		10	10	10				

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**MAXIMUM ALLOWABLE PREDICTED CONCENTRATIONS AND
APPLICABLE GROUND-WATER QUALITY STANDARDS UPPERMOST AQUIFER
LAND AND LAKES 122ND STREET LANDFILL**

PARAMETER	ND GW	ND LC	UNIT	99% CL	PQL	MAPC	AGQS	Co	MPC	35 IAC 620 STDS	
										Class I	Class II
isopropylbenzene (Cumene)	x		ug/l		5	5	5	6	5.5E-08		
lead, dissolved	x		ug/l			2Q	2Q				
lead, total			ug/l	39	2	1Q	1Q	91	9.1E-07	7.5	100
lindane	x	x	ug/l		10	10	10			0.2	1
m-dichlorobenzene	x	x	ug/l		5	5	5				
magnesium, total			ug/l	112324		2Q	2Q	455500	4.6E-03		
manganese, dissolved			ug/l			4Q	4Q				
manganese, total			ug/l	2825		2825	2825	537	5.4E-06	150	10000
mercury, total	x	x	ug/l		2	2Q	2Q			2	10
methoxychlor	x	x	ug/l		10	10	10			40	200
methylene chloride	x		ug/l		5	5	5	7	6.0E-08		
n-butylbenzene	x	x	ug/l		5	5	5				
n-propylbenzene	x		ug/l		5	5	5	6	6.0E-08		
naphthalene	x		ug/l		5	5	5	73	7.3E-07		
nickel, total			ug/l	111	150	2Q	2Q	253	2.5E-06	100	2000
nitrate, dissolved			ug/l			50	50				
nitrate, total	x		ug/l			4Q	4Q	56	5.6E-07	10000	100000
o-chlorotoluene	x	x	ug/l		5	5	5				
o-dichlorobenzene	x		ug/l		2	2	2	9	8.5E-08		
oil (hexane soluble or equivalent)	x		ug/l			5805	5805	74250	7.4E-04		
p-chlorotoluene	x		ug/l		5	5	5	3	3.1E-08		
p-dichlorobenzene	x		ug/l		5	5	5	13	1.3E-07	75	375
p-isopropyltoluene (Cymene)	x		ug/l		5	5	5	11	1.1E-07		
pH			ug/l	9		9	9	8	7.5E-08		
parathion	x	x	ug/l		10	10	10				
pentachlorophenol	x	x	ug/l		50	50	50			1	5
phenol, total	x		ug/l		10	1Q	1Q	97	9.7E-07	100	100
polychlorinated biphenyls (PCBs)	x		ug/l		200	200	200	9	8.6E-08	5	25
potassium, total			ug/l	15953		15953	15953	601500	6.0E-03		
sec-butylbenzene	x	x	ug/l		5	5	5				

Attachment B

**MAXIMUM ALLOWABLE PREDICTED CONCENTRATIONS AND
APPLICABLE GROUND-WATER QUALITY STANDARDS UPPERMOST AQUIFER
LAND AND LAKES 122ND STREET LANDFILL**

PARAMETER	ND GW	ND LC	UNIT	99% CL	PQL	MAPC	AGQS	Co	MPC	35 IAC 620 STDS	
										Class I	Class II
selenium, total	x	x	ug/l		20	2Q	2Q			50	50
silver, total	x		ug/l		10	2Q	2Q	36	3.6E-07	50	
sodium			ug/l	161691		161691	161691	4040000	4.0E-02		
styrene	x	x	ug/l		10	10	10			100	500
sulfate, dissolved			ug/l	334818		334818	334818	114	1.1E-06	400000	400000
sulfate, total			ug/l			4Q	4Q				
tert-butylbenzene	x	x	ug/l		5	5	5				
tetrachloroethylene	x	x	ug/l		5	5	5			5	25
tetrahydrofuran	x		ug/l		100000	100000	100000	296	3.0E-06		
thallium, total	x	x	ug/l		10	1Q	1Q				
toluene	x		ug/l		5	5	5	57	5.7E-07	1000	2500
toxaphene	x	x	ug/l		10	10	10			3	15
trans-1,2-dichloroethene	x		ug/l		5	5	5	2.7	2.7E-08	100	500
trans-1,3-dichloropropene	x	x	ug/l		5	5	5				
trichloroethylene	x	x	ug/l		5	5	5			5	25
trichlorofluoromethane	x	x	ug/l		5	5	5				
vanadium, total			ug/l	99	40	2Q	2Q	25	2.5E-07		
vinyl acetate	x	x	ug/l		10	10	10				
vinyl chloride	x	x	ug/l		2	2	2			2	10
xylenes	x		ug/l		5	5	5	183	1.8E-06	10000	10000
zinc, dissolved	x		ug/l			2Q	2Q				
zinc, total			ug/l	189	20	1Q	1Q	288	2.9E-06	5000	10000

NOTES:

ND GW = Not detected in ground water

ND LC = Not detected in leachate

Co = Leachate Concentration

MPC = Model Predicted Concentration. For Co equal to 1 ug/L, MPC at the edge of the zone of attenuation equals 1×10^{-6} ug/L.

99% CL = 99% Confidence Limit

PQL = Practical Quantitation Limit

Attachment B

**MAXIMUM ALLOWABLE PREDICTED CONCENTRATIONS AND
APPLICABLE GROUND-WATER QUALITY STANDARDS UPPERMOST AQUIFER
LAND AND LAKES 122ND STREET LANDFILL**

PARAMETER	ND GW	ND LC	UNIT	99% CL	PQL	MAPC	AGQS	Co	MPC	35 IAC 620 STDS	
										Class I	Class II

MAPC = Maximum Allowable Predicted Concentration

AGQS = Applicable Ground-Water Quality Standard

* Indicates 5 Times Method Detection Limit as no PQL Defined

1Q = Data for One Additional Quarter Needed to Establish Background

2Q = Data for Two Additional Quarters Needed to Establish Background

3Q = Data for Three Additional Quarters Needed to Establish Background

4Q = Data for Four Additional Quarters Needed to Establish Background

Special Waste Preacceptance Form (Profile Identification Sheet)

Facility Name: _____ Facility I.D. No. _____
 Facility Address: _____ Generator Contact Person: _____
 Generator Name: _____ Generator Mailing Address: _____
 (If Different) _____
 Generator Address: _____ Phone Number: _____
 IL Generator I.D. No.: _____ Transporter: _____
 Generator SIC Code: _____ Transporter Phone: _____
 This is a: _____ Pollution Control Waste, _____ Industrial Process Waste as defined in Section 3 of the Act.
 Process Description: _____
 Generic Waste Name: _____ Ultimate Disposal: _____

Analysis

(leave blank any constituent for which analysis has not been conducted)

Physical Characteristics _____ Major Constituents: _____
 (e.g. color, odor)
 Paint Filter Test: _____ Penetrometer Test: _____
 (Indicate pass or fail) (Indicate pass or fail in accordance with the
 procedures in 35 Ill. Adm. Code 729.321)
 Waste Phase: _____ Flash Point °F: _____ Percent Solids: _____
 (Indicate solid, liquid, semi solid or compressed gas)
 Percent Acidity/Alkalinity: _____ pH (for aqueous wastes only): _____

Constituent	Regulatory Threshold Level, ppm	PQL (ppm)	Results of the Analysis	Constituent	Regulatory Threshold Level, ppm	PQL (ppm)	Results of the Analysis
0004 Arsenic	5.0	_____	_____	0026 Cresol	200.00	_____	_____
0005 Barium	100.0	_____	_____	0027 1,4-Dichlorobenzene	7.5	_____	_____
0006 Cadmium	1.0	_____	_____	0028 1,2-Dichloroethane	0.5	_____	_____
0007 Chromium	5.0	_____	_____	0029 1,1-Dichloroethylene	0.7	_____	_____
0008 Lead	5.0	_____	_____	0030 2,4-Dinitrotoluene	0.13	_____	_____
0009 Mercury	0.2	_____	_____	0031 Heptachlor	0.008	_____	_____
0010 Selenium	1.0	_____	_____	(and its epoxide)	_____	_____	_____
0011 Silver	5.0	_____	_____	0032 Hexachlorobenzene	0.13	_____	_____
0012 Endrin	0.02	_____	_____	0033 Hexachlorobutadiene	0.5	_____	_____
0013 Lindane	0.4	_____	_____	0034 Hexachloroethane	3.0	_____	_____
0014 Methoxychlor	10.0	_____	_____	0035 Methyl ethyl ketone	200.0	_____	_____
0015 Toxaphene	0.5	_____	_____	0036 Nitrobenzene	2.0	_____	_____
0016 2,4-D(2,4-Dichloro- phenoxyacetic acid)	10.0	_____	_____	0037 Pentachlorophenol	100.0	_____	_____
0017 2,4,5-TP Silvex	1.0	_____	_____	0038 Pyridine	5.0	_____	_____
0018 Benzene	.05	_____	_____	0039 Tetrachloroethylene	0.7	_____	_____
0019 Carbon tetrachloride	0.5	_____	_____	0040 Trichloroethylene	0.5	_____	_____
0020 Chlordane	0.03	_____	_____	0041 2,4,5-Trichlorophenol	400.0	_____	_____
0021 Chlorobenzene	100.0	_____	_____	0042 2,4,6-Trichlorophenol	2.0	_____	_____
0022 Chloroform	6.0	_____	_____	0043 Vinyl Chloride	0.2	_____	_____
0023 o-Cresol	200.0	_____	_____	Reactive Sulfide	_____	_____	_____
0024 m-Cresol	200.0	_____	_____	Reactive Cyanide	_____	_____	_____
0025 p-Cresol	200.0	_____	_____	Phenols	_____	_____	_____
				EDX/TOX (circle one)	_____	_____	_____
				PCBs	_____	_____	_____

Is the certification form attached which certifies the absence of each constituent for which analysis has not been conducted (non-commingled hazardous waste only): Yes _____ No _____

The above analysis has been conducted in accordance with SW-846 Test Methods for Evaluation of Solid Waste. I have reviewed the analysis and the attached certification form (if applicable) and determined that the waste will be: _____ accepted _____ rejected in accordance with the terms of our facility operating permit. In addition, I agree to require the generator to recertify annually that this waste has not changed since the preacceptance analysis was conducted.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

Signature: _____ Date: _____
 (Facility operator or duly authorized Agent)

Annual Generator Special Waste Recertification for
Disposal of Special Waste

Generator Name: _____ Illinois ID #: _____

Generic Waste Name: _____

Process Which Generated Waste: _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is true, accurate, and complete. I have used intimate knowledge of our process which generates the waste and certify that neither the process generating the waste nor the chemical or physical characteristics of the waste have changed since the preacceptance analysis was conducted on this waste. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

For waste being received for disposal, please certify one of the following by marking it with an "X":

_____ There have been no changes in the following since the Special Waste Preacceptance Form was filed:

1. Laboratory analysis (copies to be attached);
2. Raw material in the waste-generating process;
3. The waste-generating process itself;
4. The physical or hazardous characteristics of the waste; and
5. New information on the human health effects of exposure to the waste; or

_____ The change in the physical or hazardous characteristic of the waste is not sufficient to require a new special waste profile.

Explain: _____

Signature: _____ Date: _____
(Facility operator or duly authorized Agent)

Printed Name: _____ Title: _____

Note to Generator: Preacceptance analysis must be conducted at least every five years in accordance with the receiving facility's permit.



Illinois Environmental Protection Agency Well Completion Report

SITE #: _____ COUNTY: _____ WELL #: _____ BOREHOLE #: _____

SITE NAME: _____ WELL POSITION - UPGRAD, DNGRAD, UNICH (CIRCLE ONE)

STATE PLANE COORDINATE: X _____ Y _____ (W) LATITUDE: _____ ° _____ ' _____ " LONGITUDE: _____ ° _____ ' _____ "

SURVEYED BY: _____ ILL. REGISTRATION #: _____

DRILLING CONTRACTOR: _____ DRILLER: _____

GEOLOGIST: _____ FIRM: _____

DRILLING METHOD: _____ DRILLING FLUIDS (TYPE): _____

DATE STARTED: _____ DATE FINISHED: _____

REPORT FORM COMPLETED BY: _____ DATE: _____

ANNULAR SPACE DETAILS

TYPE OF SURFACE SEAL: _____

TYPE OF ANNULAR SEALANT: _____

INSTALLATION METHOD: _____

SETTING TIME: _____

TYPE OF BENTONITE SEAL - GRANULAR, PELLET, SLURRY
(CIRCLE ONE)

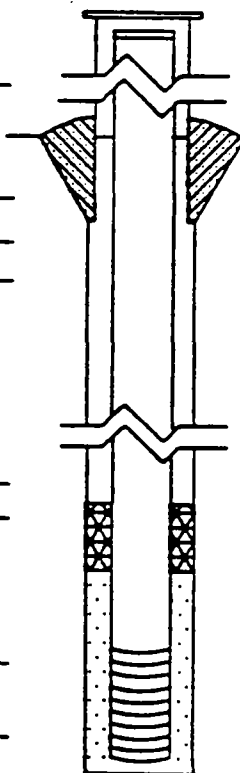
INSTALLATION METHOD: _____

SETTING TIME: _____

TYPE OF SAND PACK: _____

GRAIN SIZE: _____ (SIEVE SIZE)

INSTALLATION METHOD: _____



ELEVATIONS DEPTHS (.01 ft) (MSL)° (BGS)

_____ TOP OF PROTECTIVE CASING
_____ TOP OF RISER PIPE
_____ GROUND SURFACE
_____ TOP OF ANNULAR SEALANT
_____ DEPTH TO WATER
_____ TOP OF SEAL
_____ TOP OF SANDPACK
_____ TOP OF SCREEN
_____ BOTTOM OF SCREEN
_____ BOTTOM OF WELL
_____ BOTTOM OF BOREHOLE

• REFERENCED TO A NATIONAL GEODETIC VERTICAL DATUM

WELL CONSTRUCTION MATERIALS (CIRCLE ONE)

PROTECTIVE CASING	SS304, SS316, PTFE, PVC OR OTHER:
RISER PIPE ABOVE W.T.	SS304, SS316, PTFE, PVC OR OTHER:
RISER PIPE BELOW W.T.	SS304, SS316, PTFE, PVC OR OTHER:
SCREEN	SS304, SS316, PTFE, PVC OR OTHER:

MEASUREMENTS

DIAMETER OF BOREHOLE (in)	
ID OF RISER PIPE (in)	
PROTECTIVE CASING LENGTH (ft)	
RISER PIPE LENGTH (ft)	
BOTTOM OF SCREEN TO END CAP (ft)	
SCREEN LENGTH (1st SLOT TO LAST SLOT)	
TOTAL LENGTH OF CASING (ft)	
SCREEN SLOT SIZE **	

TABLE 1

IEPA MONITOR WELL PLUGGING PROCEDURES (test boring)

	Well Construction	Plugging Procedure
I. Unconsolidated Sediment Wells	I-A. ...if backfilled with cement grout above bentonite seal and/or sandpack:	<ol style="list-style-type: none"> 1. Cut casing off at desired depth. 2. Mix neat cement slurry (5 gal. water per 94 lb. bag cement) 3. Insert tremi pipe (1" i.d. pvc) into well and extend to bottom. 4. Slowly pump slurry under low pressure through tremi pipe. 5. Slowly withdraw tremi pipe - making sure bottom of pipe remains below pure slurry. 6. Continue slow pumping until all formation water and the watery slurry mix is displaced from top of casing.
	I-B. ...if backfilled with soft sediments (cuttings) above bentonite seal and/or sandpack:	<ol style="list-style-type: none"> 1. Knock out and remove thin surface concrete plug, if present. 2. Re-auger entire length of well. 3. Remove well casing from re-augered borehole. 4. Mix neat cement slurry (5 gal. water per 94 lb. bag cement). 5. Insert tremi pipe (1" i.d. pvc) into augers and extend to bottom. 6. Slowly pump slurry under low pressure through tremi pipe. 7. Continue slow pumping until all formation water and the watery slurry mix is displaced from top of casing. 8. Slowly withdraw tremi pipe - making sure bottom of pipe remains below pure slurry. 9. Pull a flight of augers (5' if in unstable materials and hole collapse is likely or 10' if in competent material and collapse is unlikely). 10. Top off cement slurry after each flight is removed.
	I-C. ...if monitor well construction is unknown:	<ol style="list-style-type: none"> 1. Follow procedures in I-A.
II. Bedrock Wells	II-A. ...All bedrock monitor wells:	<ol style="list-style-type: none"> 1. Cut casing off at desired depth. 2. Mix neat cement slurry (5 gal. water per 94 lb. bag cement). 3. Insert tremi-pipe (1" i.d. pvc) into well and extend to bottom. 4. Slowly pump slurry under low pressure through tremi pipe. 5. Slowly withdraw tremi pipe making sure bottom of pipe remains below pure slurry. 6. Continue slow pumping until all formation water and the watery slurry mix is displaced from top of casing.

Page 1 of

TRANS
CODE
A

REPORT DUE DATE ____/____/____
36 M D Y 41

FEDERAL ID NUMBER _____

MONITOR POINT NUMBER _____
(see Instructions) 19 22

DATE COLLECTED / /
23 M D Y 28

FACILITY NAME _____

BACKGROUND SAMPLE (X) _____ TIME COLLECTED _____:_____:_____
54 (24 Hr. Clock) 55 H M 58

UNABLE TO COLLECT SAMPLE (see Instructions)	59
--	----

DATE RECEIVED _____
42 M D Y 47

MONITOR POINT SAMPLED BY _____
(see Instructions) 60 OTHER (SPECIFY) _____

SAMPLE FIELD FILTERED — INORGANICS (X) _____ ORGANICS (X) _____

SAMPLE APPEARANCE

COLLECTOR COMMENTS

LAB COMMENTS

RECORD CODE	L	P	C	S	M	0	2
	1						7

TRANS CODE A (COLUMNS 9-29 FROM ABOVE)

[illegible]

TRANS CODE A
8

MONITOR POINT NUMBER

19 22

DATE COLLECTED ____/____/____
 23 M D Y 23

LAB _____
29

29

.. 522 1215



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL

Affidavit For Certification of Closure of
Non-Hazardous Waste Facilities

This form shall be used for sites closing after January 29, 1985.

Name of Site: _____

IEPA ID #: _____

Address of Site: _____

Closest City: _____

County: _____

1. Indicate the type of facility which is being requested to be certified closed. Also indicate the permit number, the date of issuance in which the latest closure plan and post-closure care plan were approved.

Disposal Unit(s) _____

Indefinite Storage Unit(s) _____

Treatment Unit(s) _____

Storage Unit(s) _____

Last Permit # _____

Date of Permit _____

2. Pursuant to 35 Ill. Adm. Code Subtitle G, 807.508, to certify closure the operator of the waste management site shall submit the following documentation to the Permit Section, Division of Land Pollution Control. An original and two copies of all documents including this form shall be submitted (for plan sheets, three copies only).
 - a. Submit plan sheets for the closed site which indicate final contours achieved at the completion of closure activities.
 - b. Identify the date the facility ceased accepting waste and the date closure was actually completed. Necessary documentation should be provided to demonstrate the date final cover for the entire disposal area was completed, and that all other aspects of the closure plan were completed (i.e., final grading, seeding, security etc.).

Date site ceased accepting waste: _____

Date closure completed: _____

If the facility closed before January 1, 1988 without an approved closure plan, provide documentation that the closure requirements in 807.318 and existing permits have been met. All sites closing after January 1, 1988 must have an approved closure plan.

- c. Submit proof that a description of the site, including a plat, has filed with the appropriate county land recording authority, per 807.318(c).
- d. For non-governmental owned or operated sites only, submit three copies of proof of Financial Assurance for post-closure activities, where applicable (include a cost estimate per 807.622 and appropriate financial instrument on original Agency forms).

Failure to provide any of the items described above will result in rejection of the closure notice.

OPERATOR

ENGINEER

NAME: _____

NAME: _____

ADDRESS: _____

ADDRESS: _____

PHONE NUMBER: _____

PHONE NUMBER: _____

I hereby affirm that the referenced site has been closed in accordance with the closure plan if applicable, and that all information contained in this submission is true and accurate to the best of my knowledge and belief.

SIGNATURE OF OPERATOR:

SIGNATURE OF ENGINEER:

(date)

(date)

Ill. Reg. No. _____

SEAL